

**California Department of Education Assessment Development & Administration Division**



# Summative English Language Proficiency Assessments for California 2022–23 Technical Report

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**By ETS**



**Contract #CN220002**

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Acronyms and Initialisms Used in the *Summative English Language Proficiency Assessments for California Technical Report*

|  |  |
| --- | --- |
| **Term** | **Definition** |
| 2PL-IRT | two-parameter logistic item response theory |
| AERA | American Educational Research Association |
| AI | artificial intelligence |
| AIS | average item score |
| ALTD | Assessment & Learning Technology Development |
| APA | American Psychological Association |
| AST | Administration and Scoring Training |
| ATA | automated test assembly |
| CAASPP | California Assessment of Student Performance and Progress |
| CAI | Cambium Assessment, Inc. |
| CALPADS | California Longitudinal Pupil Achievement Data System |
| CalTAC | California Technical Assistance Center |
| CARS | Crisis Alert Response System |
| CAST | California Science Test |
| *CCR* | *California Code of Regulations* |
| CDE | California Department of Education |
| CDS | county/district/school |
| CERS | California Educator Reporting System |
| CR | constructed response |
| CSEM | conditional standard error of measurement |
| DEI | Data Entry Interface |
| *DFA* | *Directions for Administration* |
| DIF | differential item functioning |
| DRM | data review meeting |
| *EC* | *Education Code* |
| EL | English learner |
| ELA | English language arts/literacy |
| ELAS | English language acquisition status |
| ELP | English language proficiency |
| ELPAC | English Language Proficiency Assessments for California |
| eSKM | Enterprise Score Key Management |
| ESSA | Every Student Succeeds Act |
| FT | field test |
| GIS | Group Identification Sheet |
| GPCM | generalized partial credit model |
| IBIS | Item Banking Information System |
| IEP | individualized education program |
| IFEP | initial fluent English proficient |
| IRF | item response function |
| IRM | item review meeting |
| IRT | item response theory |
| ISAAP | Individual Student Assessment Accessibility Profile |
| IWW | item writer workshop |
| K | kindergarten |
| K–12 | kindergarten through grade twelve |
| K–2 | kindergarten through grade two |
| LEA | local educational agency |
| LOSS | lowest obtainable scale score |
| MC | multiple choice |
| MH | Mantel-Haenszel |
| MH-DIF | Mantel-Haenszel differential item functioning |
| MOU | Memorandum of Understanding |
| NCME | National Council on Measurement in Education |
| ONE | Online Network for Evaluation |
| OTI | Office of Testing Integrity |
| PAR | Psychometric Analysis & Research |
| *PFA* | *Preparing for Administration* |
| PL3 | Performance Level 3 |
| PL4 | Performance Level 4 |
| PPT | paper–pencil test |
| QA | quality assurance |
| QWK | quadratic-weighted kappa |
| RFEP | reclassified fluent English proficient |
| SBE | State Board of Education |
| SCOE | Sacramento County Office of Education |
| SD | standard deviation |
| SEM | standard error of measurement |
| SFTP | secure file transfer protocol |
| SMD | standardized mean difference |
| SR | selected response |
| SSID | Statewide Student Identifier |
| SSR | Student Score Report |
| STAIRS | Security and Test Administration Incident Reporting System |
| SVM | Support Vector Machine |
| TCC | test characteristic curve |
| TDS | test delivery system |
| TOMS | Test Operations Management System |
| TVI | teacher of students with visual impairment |
| UAT | user acceptance testing |
| UDL | Universal Design for Learning |
| *USC* | *United States Code* |
| VI | visual impairment |

## Introduction

This technical report focuses on the development, administration, psychometric analyses, and results of the administration of the Summative English Language Proficiency Assessments for California (ELPAC) for the 2022–23 test administration. This chapter provides an overview of the Summative ELPAC program, including background information, the purpose of the assessment, the intended population, the testing window, and an overview of the technical report.

### ELPAC Overview

The ELPAC “is the required state test for English language proficiency (ELP) that must be given to students whose primary language is a language other than English. State and federal laws require that local educational agencies administer a state test of ELP to eligible students in kindergarten through grade twelve” (California Department of Education [CDE], 2023a). California *Education Code (EC)* Section 313(a) requires that the assessment of ELP be done upon initial enrollment and annually thereafter until the local educational agency (LEA) reclassifies the student as fluent English proficient.

The 2022–23 Summative ELPAC followed the same test design that was developed and implemented for the 2019–20 Summative ELPAC. This high-level test design was approved by the California State Board of Education (SBE) in May 2019 for the computer-based Summative ELPAC (CDE, 2019). The test design drew upon current best practices and the latest research findings, and it maintained consistency with California’s *English Language Arts/English Language Development Framework* (CDE, 2014b). The test design described guiding principles for developing a computer-based assessment at kindergarten through grade twelve (K–12) in the domains of Listening, Speaking, and Reading. In the domain of Writing, the design included development of computer-based assessments at grades three through twelve while retaining paper-based assessments for kindergarten through grade two (K–2) Writing. Within this test design, efforts have been continuously made to include more challenging items than were used in past forms, to better differentiate across the performance levels.

### Purposes of the Assessment

The ELPAC consists of two assessments: the Initial ELPAC and the Summative ELPAC. The Initial ELPAC identifies whether a student is initial fluent English proficient (IFEP) or an English learner (EL) who must receive additional instructional supports.

Students identified as ELs on the Initial ELPAC or previous state ELP assessments go on to take the Summative ELPAC, which is administered annually to students in K–12. The Summative ELPAC has two purposes, to

1. determine the level of ELP of EL students; and
2. assess the progress of EL students in acquiring the skills of listening, speaking, reading, and writing in English.

The content of table 1.1 describes the differences between the Initial ELPAC and Summative ELPAC.

Table 1.1 Differences Between the Initial ELPAC and Summative ELPAC

|  |  |
| --- | --- |
| **Initial ELPAC** | **Summative ELPAC** |
| This is an assessment used to identify a student as either an EL who needs support to learn English or as IFEP. | This is an assessment used to measure the skills of EL students. The results will help the school or LEA determine whether the student is ready to be reclassified as proficient in English. |
| This assessment is administered within 30 days of when the student enrolls in a California school for the first time. | This assessment is administered every spring, from February 1 to May 31. |
| A student takes this assessment one time only. The Initial ELPAC is taken before the Summative ELPAC. | A student takes this assessment annually until reclassified. |
| There is one test form. | The test form is refreshed annually. |
| There are six grade levels and grade spans: kindergarten, 1, 2, 3–5, 6–8, and 9–‍12. | There are seven grade levels and grade spans: kindergarten, 1, 2, 3–5, 6–8, 9–10, and 11–‍12. |
| * The Speaking domain is scored locally, and raw scores are entered into the Data Entry Interface (DEI). * The Writing domain is also scored locally; these scores are entered into the DEI for K–2 or the Teacher Hand Scoring System for grades three through twelve. * Local scoring for both the Speaking and Writing domains is done by a trained ELPAC test examiner. * The Listening and Reading domains are machine-scored. * Student Score Reports (SSRs) are generated electronically in the Test Operations Management System (TOMS) once all domains have been completed and scores have been merged. These SSRs can be printed locally by designated staff. | * The Speaking domain is scored locally, and raw scores are entered into the DEI. * The Writing domain is scored by ETS. * The Listening and Reading domains are machine-scored. * Once all domains have been completed and scored, SSRs are provided by ETS electronically to the LEA in TOMS and can be printed locally by designated staff. |

### Test Content

The content of the Summative ELPAC is aligned with the 2012 *California English Language Development Standards: Kindergarten Through Grade 12* (CDE, 2014a). The test content corresponds to the *California Common Core State Standards: English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects* (CDE, 2013a)*.* Items on the Summative ELPAC also correspond to the *California Common Core State Standards for Mathematics* (CDE, 2013b) as well as the *Next Generation Science Standards for California Public Schools, Kindergarten through Grade Twelve* (CDE, 2021).

### Intended Population

All students who were previously identified as ELs, and were enrolled between February 1, 2023, and May 31, 2023, were required to take the 2022–23 Summative ELPAC before the close of the testing window. All students classified as ELs must be tested annually during the Summative ELPAC window until they are reclassified as fluent English proficient on the basis of the CDE’s established guidelines for reclassification established by the California SBE (*EC*313[f]).

Students with disabilities whose individualized education program (IEP) or Section 504 plan specifies their disability precludes them from accessing one or more domains of the ELPAC, even with allowed universal tools, designated supports, or accommodations, are eligible for a domain exemption(s). Students with the most significant cognitive disabilities who cannot access the Summative ELPAC even with approved accessibility resources were eligible to take the Summative Alternate ELPAC, if their IEP team determined alternate assessments were the most appropriate.

### Testing Windows and Times

The Summative ELPAC testing window runs from February 1 through May 31 annually. During this time, any student identified as an EL was required to be administered the Summative ELPAC.

The ELPAC is an untimed assessment, and students were allowed as much time as they needed to complete their responses in each domain. The assessment could be administered over the course of several days. The estimated testing times for the Summative ELPAC domains were posted by form assignment on the ELPAC website. Estimated testing times were provided for administration planning only.

### Test Scores

The SBE approved the reporting hierarchy of the Summative ELPAC in May 2018. Individual student scores for the Summative ELPAC for all grade levels (i.e., K–12) included

* an overall performance level and scale score;
* an oral language proficiency level and scale score, which reflect performance on the Listening and Speaking domains; and
* a written language proficiency level and scale score, which reflect performance on the Reading and Writing domains.

Each student who took the Summative ELPAC received an overall score, which placed the student within one of the four Summative ELPAC performance levels:

1. Level 1—Beginning to Develop
2. Level 2—Somewhat Developed
3. Level 3—Moderately Developed
4. Level 4—Well Developed (indicating the highest level of performance)

These same performance levels are used for the oral language and written language composites.

Each student who took the Summative ELPAC also received performance levels based on performance in individual domains (Listening, Speaking, Reading, and Writing). The three Summative ELPAC performance levels for the domains indicate the following:

1. Beginning to Develop
2. Somewhat/Moderately Developed
3. Well Developed

### Significant Developments in 2022–23

#### Crisis Alert Response System Process

The Crisis Alert Response System (CARS) was introduced as an automatic process to notify a primary LEA ELPAC coordinator and superintendent when a student’s actions or response during testing caused concern. CARS incidents were tracked and maintained in TOMS.

#### *Preparing for Administration* Document

The new, nonsecure *Preparing for Administration (PFA)* documents containing the planning and preparation content from the *Directions for Administration (DFAs)* were posted on the Manuals and Instructions web page on the ELPAC website. The *PFA* was used by educators to prepare for the test administration and to become familiar with testing guidelines. There was one *PFA* for K–2 and one *PFA* for grades three through twelve.

#### *Directions for Administration* Update

The following updates were made to the *DFAs*:

* The information related to preparing for the administration was removed.
* Instructions for remote testing were incorporated into the in-person testing *DFAs*.
* Domain tabs were added to even-numbered pages to help identify each domain section.
* The Speaking domain practice question was revised in both the *DFA* and the test delivery system (TDS).

#### How to Start an ELPAC Test Session Document

With the creation of the new *PFA* and updates made to the *DFAs*, the day-of instructions pertaining to starting, monitoring, and ending the assessment remained in the *Summative ELPAC Online Test Administration Manual* and in a print-friendly document called “How to Start an ELPAC Test Session.” Similarly, a “How to Start a Remote ELPAC Test Session for Grades K–2” document and a “How to Start a Remote ELPAC Test Session for Grades 3–‍12” document were created for remote test administration information.

#### Additional Student Score Report Language

Korean was a new language available for SSRs in the 2022–23 Summative ELPAC test administration in addition to the other languages (English, Filipino, Spanish, Traditional Chinese, and Vietnamese).

#### Automated Test Assembly

Automated test assembly (ATA) methods were used to assemble the first version of the operational form for each grade-level assessment during the 2022–23 test administration. ETS’ Assessment & Learning Technology Development staff reviewed the items selected using the ATA methodology and adjusted each operational test form as needed before the ETS psychometrics team reviewed the operational forms. Refer to subsection [*4.1.2 Automated Test Assembly*](#_Automated___1) for more information on how ATA was used.

### Groups and Organizations Involved with the ELPAC

#### California State Board of Education

The SBE is the state agency that establishes educational policy for K–12 in the areas of standards, instructional materials, assessment, and accountability. The SBE adopts textbooks for kindergarten through grade eight, adopts regulations to implement legislation, and has the authority to grant waivers of the *EC*.

In addition to adopting the rules and regulations for itself, its appointees, and California’s public schools, the SBE is also the state educational agency responsible for overseeing California’s compliance with programs that meet the requirements of the federal Every Student Succeeds Act as well as the state’s Public School Accountability Act that measures the academic performance and progress of schools on a variety of academic metrics (CDE, 2023c).

#### California Department of Education

The CDE oversees California’s public school system, which is responsible for the education of more than 5,800,000 children and young adults in more than 10,010 schools.[[1]](#footnote-2) California aims to provide a world-class education for all students, from early childhood to adulthood. The CDE serves the state by innovating and collaborating with educators, school staff, parents/guardians, and community partners which together, as a team, prepare students to live, work, and thrive in a highly connected world.

Within the CDE, it is the Instruction, Measurement, & Administration Branch that oversees programs promoting improved student achievement. Programs include oversight of statewide assessments and the collection and reporting of educational data (CDE, 2023b).

#### California Educators

A variety of California educators were selected on the basis of their qualifications, experiences, demographic information, and geographic locations to participate in the ELPAC development process. This included work related to defining the purpose and scope of the assessment, assessment design, item development, item reviews, standard setting, score reporting, and scoring the constructed-response (CR) items.

#### Contractors

A number of organizations contribute to the success of the Summative ELPAC.

##### Primary Testing Contractor—ETS

The CDE and the SBE contract with ETS to develop, administer, and report the Summative ELPAC. As the primary testing contractor, ETS has overall responsibility for working with the CDE to implement and maintain an effective assessment system and coordinating ETS’ work with its subcontractors.

Activities conducted directly by ETS include, but are not limited to, the following:

* Providing management of the program activities
* Supporting and training county offices of education, LEAs, and direct funded charter schools
* Constructing, producing, and controlling the quality of paper–pencil test booklets and related test materials
* Constructing, producing, and controlling the quality of Summative ELPAC test forms and related test materials, including grade- and content-specific *DFAs*
* Developing processes and scripts associated with remote testing
* Hosting and maintaining a website with resources for LEA ELPAC coordinators
* Developing, hosting, and providing support for TOMS
* Supporting the California Educator Reporting System (CERS)
* Processing student test assignments
* Processing orders and shipment of test materials
* Servicing all aspects of CR scoring for the Summative ELPAC
* Producing and distributing score reports electronically
* Developing a summary score reporting website that can be viewed by the public
* Completing all psychometric procedures
* Providing a tiered help desk support system for LEAs

##### Subcontractor—Cambium Assessment, Inc.

ETS also monitors and manages the work of Cambium Assessment, Inc. (CAI), subcontractor to ETS for the ELPAC System of computer-based assessments. Activities conducted by CAI include

* providing the CAI proprietary TDS, including the Student Testing Interface, Test Administrator Interface, secure browser, and practice and training tests;
* hosting and providing support for its TDS, a component of the overall ELPAC Assessment Delivery System;
* hosting and providing support for the DEI, the web browser–based application that, for the operational administration of the Summative ELPAC, allows users to enter student scores;
* scoring machine-scorable items; and
* providing high-level technology help desk support to LEAs for technology issues directly related to the TDS.

##### Subcontractor—Sacramento County Office of Education

ETS contracted with the Sacramento County Office of Education to manage all activities associated with educator recruitment, training, and outreach, including the following:

* Supporting and training county offices of education, LEAs, and charter schools
* Developing informational materials
* Recruiting and providing logistics for educator meetings
* Producing Administration and Scoring Training materials and videos, including an online training site for LEA coordinators and test examiners
* Producing *DFA*s

### Systems Overview and Functionality

#### Test Operations Management System

TOMS is the password-protected, web-based system used by LEAs to manage all aspects of ELPAC testing. TOMS serves various functions, including, but not limited to, the following:

* Managing test administration windows
* Assigning and managing ELPAC online user roles
* Managing student test assignments and accessibility resources
* Ordering test materials
* Viewing and downloading reports
* Reporting security incidents
* Providing a platform for authorized user access to secure materials, such as ELPAC *DFAs,* student data and results, ELPAC user information, and access to the ELPAC Security and Test Administration Incident Reporting System/Appeals process

TOMS receives student enrollment data and LEA and school hierarchy data from the California Longitudinal Pupil Achievement Data System (CALPADS) via daily feed. CALPADS is “a longitudinal data system used to maintain individual-level data including student demographics, course data, discipline, assessments, staff assignments, and other data for state and federal reporting.”[[2]](#footnote-3)

LEA staff involved in the administration of the ELPAC—such as LEA ELPAC coordinators, site ELPAC coordinators, and test examiners—are assigned varying levels of access to TOMS. For example, only an LEA ELPAC coordinator is given permission to assign and manage user roles; a test administrator or test examiner cannot download student reports. A description of user roles is explained more extensively in the *2022–23 Summative ELPAC Online Test Administration Manual* (CDE, 2023d).

#### Test Delivery System

The TDS is the means by which the statewide computer-based assessments are delivered to students. Components of the TDS include

* the Test Administrator Interface, the web browser–based application that allows test examiners to activate student assessments and monitor student testing;
* the Student Testing Interface, on which students take the assessment using the secure browser; and
* the secure browser, the computer-based application through which the Student Testing Interface may be accessed. (The secure browser prevents students from accessing other applications during testing.)

#### Practice and Training Tests

All California testing programs have practice and training tests to inform educators, parents/‌guardians, and students about the individual assessments. The practice and training tests were provided to LEAs to prepare students and LEA staff for administration of the Summative ELPAC. These tests simulated the experience of the Summative ELPAC computer-based assessments. Unlike the summative assessments, the practice and training tests did not gauge student success on the operational assessment, or produce scores. Students, teachers, and the public could access them using a web browser, although accessing them through the secure browser permitted students to take the tests using the text-to-speech embedded accommodation and to test assistive technology. When remote testing was added as an option, the practice and training tests permitted test examiners and students to practice using the remote monitoring and communication features.

The purpose of the training tests is to allow students and test examiners to quickly become familiar with the user interface and components of the TDS as well as with the process of starting and completing a testing session.

The purpose of the practice tests is to allow students and test examiners to experience a grade-level assessment, grade-specific items and difficulty levels, and the format and structure of an operational assessment.

A purpose of both the practice and training tests is to provide an opportunity for educators to assign embedded designated supports and accommodations and determine how they worked for their students prior to using the resources in an operational test setting.

#### California Educator Reporting System

CERS is the system used by LEAs to view preliminary student results from ELPAC testing. The primary purpose of CERS is to provide educators and administrators with access to timely assessment results for individual students and groups of students.

CERS allows educators to view their students’ test results at the individual student level and at the aggregated level using grouping and other features. For example, educators can create customized groups from assigned student groups based on demographic information or other characteristics of their choosing. The student results sent to CERS are appropriate for analysis of assessment results for use in informing instruction.

#### Test Results for California’s Assessments Website

The Test Results for California’s Assessments website is used by educators, families, researchers, and interested members of the public to view aggregated results from the Summative ELPAC. The primary purpose of the Test Results for California’s Assessments website is to provide users with access to results data for groups of students and to allow comparison of test result data for various student groups. Test scores for a given grade level are aggregated at the school, LEA or direct funded charter school, county, and state levels. The aggregated scores are generated for selected student groups of interest (e.g., gender, ethnicity, economic status, migrant status, and disability status) and for the total population.

#### Constructed-Response Scoring Systems for ETS

CR items from the Writing domain in the TDS and from the K–2 Answer Books were routed to ETS’ CR scoring system. CR items were scored by certified raters who were provided in-depth training and certified before starting the human-scoring process. Raters were supervised by a scoring leader and provided ELPAC scoring materials such as anchor sets, scoring rubrics, validity samples, qualifying sets, and condition codes for unscorable responses within the interface. The quality-control processes for CR scoring are explained further in section [*9.5. Quality Control of Scoring*](#_Quality_Control_of_4).

### Overview of the Technical Report

This technical report addresses the characteristics of the 2022–23 administration of the Summative ELPAC and contains nine additional chapters, as follows:

* [Chapter 2](#_Overview_of_Summative) presents an overview of Summative ELPAC processes.
* [Chapter 3](#_Item_Development_and_1) describes the procedures followed during item development and review.
* [Chapter 4](#_Test_Assembly) provides information on test assembly processes.
* [Chapter 5](#_Test_Administration_1) details the processes involved in the actual test administration. It also describes the procedures followed to maintain test security throughout the test administration process.
* [Chapter 6](#_Standard_Setting) gives a brief overview of the standard setting procedures.
* [Chapter 7](#_Scoring_and_Reporting) provides information on the scoring processes, including the content being measured, as well as the content and psychometric criteria. Also discussed is the development of materials, such as scoring rubrics, and range finding.
* [Chapter 8](#_Psychometric_Analyses_1) summarizes the statistical analyses and results for the operational administration of the Summative ELPAC, including
* classical item analysis;
* differential item functioning analysis; and
* item response theory calibration, linking, and scaling.
* [Chapter 9](#_Quality_Control_Procedures_1) highlights the quality-control processes used at various stages of the operational administration of the Summative ELPAC, including item development, test form development, test administration, scoring procedures, and psychometric analysis processes.
* [Chapter 10](#_Continuous_Improvement) details the ongoing means of program improvement.

### References

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## Overview of Summative ELPAC Processes

This chapter provides an overview of the processes implemented by ETS during a typical, full testing cycle for the Summative English Language Proficiency Assessments for California (ELPAC), including item development, test design, test administration, and scoring. The details on each step in the process will be presented in the subsequent chapters.

### Item Development

Items for the Summative ELPAC were developed by outside item writers or California educators along with ETS, and then reviewed by the California Department of Education (CDE) and California educators to ensure the items are appropriate for kindergarten through grade twelve English learners in California. The detailed process for developing items is outlined in [*Chapter 3: Item Development and Review*](#_Item_Development_and_1).

#### Item Format

The Summative ELPAC includes the following computer-based item formats:

* Selected response—Students are instructed to select the best choice.
* Constructed response (CR)—Students are instructed to produce a response.

The Reading and Listening domains have multiple-choice single-select items. The Writing and Speaking domains contain only CR items.

#### Item Specifications

The item specifications describe the characteristics of the items that should be written to measure each content standard. Items of the same type should consistently measure the content standards in the same way. The *ELPAC Item Writing Guidelines* were given to item developers to help ensure that the assessments are measuring the intended constructs without influence from extraneous factors. These documents contain item specification tables and provide item writers with definitions of the constructs that are intended to support the claims of measurement and provide clear direction regarding the types of evidence needed for students to demonstrate their knowledge and skills (CDE, 2019, 2021). These specifications are reviewed annually by ETS to ensure the document reflects current practices and style. Any updates to the *ELPAC Item Writing Guidelines* are sent to the CDE for review and approval.

### Test Assembly

ETS’ assessment specialists assembled the Summative ELPAC, which was reviewed and approved by the CDE. This process began with the creation of form assembly specifications, which described the content characteristics, psychometric characteristics, and quantity of items to be used in the operational 2022–23 Summative ELPAC (ETS, 2022). ETS created the form assembly specifications that the CDE reviewed and approved.

After the form assembly specifications were approved, ETS’ assessment specialists assembled the assessments according to the specifications. ETS’ assessment specialists and psychometricians reviewed the form planners before they were delivered to the CDE for review. The CDE reviewed and approved the form planners after ETS revised the form planners as needed.

#### Test Length

The Summative ELPAC is composed of four domains: Listening, Speaking, Reading, and Writing. Forms 1 and 7 had only operational items. Forms 2–6 included embedded field test items within the operational items in designated domains; only selected local educational agencies (LEAs) received forms with the field test items.

##### Operational Testing

The number of operational items on a test form varies by grade level and grade span and is based on the *Test Blueprints for the* *Summative English Language Proficiency Assessments for California* (CDE, 2019).

##### Field Testing

Each grade level and grade span of the Summative ELPAC has five sets of field test items that are embedded into a single domain spread across forms 2, 3, 4, 5, and 6:

* Form 2 has field test items embedded into the Listening domain.
* Form 3 has field test items embedded into the Speaking domain.
* Forms 4 and 5 have field test items embedded into the Reading domain.
* Form 6 has field test items embedded into the Writing domain.

#### Test Blueprints

The 2022–23 Summative ELPAC aligned to the same test blueprints that were developed and implemented for the 2019–20 Summative ELPAC. These blueprints were developed on the basis of analysis from a pilot of ELPAC items, a stand-alone field test, and the transition of the ELPAC from a paper–pencil test to a computer-based assessment. The blueprints were approved by the California State Board of Education in May 2019 for the computer-based Summative ELPAC (CDE, 2019).

#### Item Selection

Operational items on the Summative ELPAC were selected from items field-tested prior to the 2022–23 Summative ELPAC administration. These items were reviewed for content and psychometric characteristics by ETS and the CDE. For the process used to select and review operational and field test items, refer to [*Chapter 3: Item Development and Review*](#_Item_Development_and_1) and [*Chapter 4: Test Assembly*](#_Toc120802066).

### Test Administration

The Summative ELPAC was administered using the secure browser and test delivery system (TDS), ensuring a secure, confidential, standardized, consistent, and appropriate administration for students. Additional information about the administration of the Summative ELPAC can be found in [*Chapter 5: Test Administration*](#_Test_Administration_1).

Testing could occur in person and remotely. Students receiving in-person instruction were tested in person, at a school site. Remote administration, which is intended as an option for an LEA only when its students are receiving remote instruction, occurred when either the students, test examiner, or both were located at different physical locations. In remote testing, the test examiner monitors students’ progress throughout the assessment by using remote monitoring tools connected to the TDS.

#### Test Security and Confidentiality

All operational assessments within the ELPAC System are secure. For the Summative ELPAC administration, every person having access to test materials maintained the security and confidentiality of the assessments. ETS’ internal Code of Ethics requires that all test information, including tangible materials (such as test booklets, test items, and test results), confidential files, processes, and activities were kept secure. To ensure security for all assessments that ETS develops or handles, ETS maintains an Office of Testing Integrity (OTI). A detailed description of the OTI and its mission is presented in subsection[*5.8.1 ETS’ Office of Testing Integrity*](#_ETS’_Office_of_1) in [*Chapter 5: Test Administration*](#_Test_Administration_1).

In the pursuit of enforcing secure practices, ETS strives to safeguard the various processes involved in an assessment development and administration cycle. Those processes are listed next. The practices related to each of the following security processes are discussed in detail in section [*5.8 Test Security and Confidentiality*](#_Test_Security_and_1):

* Procedures to maintain standardization of test security
* Test security monitoring
* Security of electronic files using a firewall
* Transfer of scores via secure data exchange
* Data management in the secure database
* Statistical analysis on secure servers
* Student confidentiality
* Student test results

#### Procedures to Maintain Standardization

ETS takes all necessary measures to ensure the standardization of administration of the Summative ELPAC.

The Summative ELPAC is administered in conjunction with the other assessments that compose the ELPAC System. ETS employs processes to ensure the standardization of an administration cycle; these processes are discussed in more detail in section [*5.3 User Roles and Standardization*](#_User_Roles_and).

Staff at LEAs involved in the ELPAC administration include LEA ELPAC coordinators, site ELPAC coordinators, and test examiners. The responsibilities of each of the staff members are described in the *Summative ELPAC Online Test Administration Manual* (CDE, 2023b).

Several series of instructions regarding the ELPAC administration are compiled in detailed manuals and provided to the LEA staff. Such documents include, but are not limited to, the following:

* ***Summative ELPAC Online Test Administration Manual*—**This web-based manual provides test administration procedures and guidelines for LEA ELPAC coordinators and site ELPAC coordinators (CDE, 2023b). (Refer to [*5.3.4.3 Summative ELPAC Online Test Administration Manual*](#_Summative_ELPAC_Online_1) in [chapter 5](#_Test_Administration_1) for more information.)
* ***CAASPP and ELPAC Test Operations Management System (TOMS) User Guide*—**This web-based manual provides instructions for TOMS, allowing LEA staff, including LEA ELPAC coordinators and site ELPAC coordinators, to perform several tasks, including adding and managing users, assigning assessments, and configuring computer-based student test settings (CDE, 2023a). (Refer to [*5.3.4.4 CAASPP and ELPAC Test Operations Management System User Guide*](#_CAASPP_and_ELPAC_2) in [chapter 5](#_Test_Administration_1) for more information.)
* ***Preparing for Administration—***This document—one for kindergarten through grade two and one for grades three through twelve—includes planning and preparation content to assist test examiners with test preparation (CDE, 2023c, 2023d). (Refer to [*5.3.4.1 Preparing for Administration*](#_Preparing_for_Administration) in [chapter 5](#_Test_Administration_1) for more information.)
* ***Directions for Administration*—**These directions include test examiner directions and scripts for administering the assessments. They contain grade-specific and form-specific information needed by the test examiners during test sessions. (Refer to [*5.3.4.2 Directions for Administration*](#_Directions_for_Administration) in [chapter 5](#_Test_Administration_1) for more information.)

### Fairness and Accessibility

Several procedures are in place to ensure that the Summative ELPAC is fair and accessible to all students. This section provides information on the available accessibility resources.

#### Overview

All eligible students enrolled in a California public school participate in the ELPAC System of assessments, including students with disabilities. Additional resources are sometimes needed for these students. The CDE provides a full range of assessment resources for all students, including those who are students with disabilities.

#### Student Accessibility Resources

There are four different categories of student accessibility resources in the California assessment accessibility system, including universal tools, designated supports, accommodations, and unlisted resources that are permitted for use in ELPAC computer-based assessments. These are listed in the CDE California Assessment Accessibility Resources Matrix (Accessibility Matrix) (CDE, 2022).

**Universal tools** are available to all students. These resources may be turned on and off when embedded as part of the technology platform for the computer-based ELPAC on the basis of student preference and selection.

**Designated supports** are available to all students when determined as needed by an educator or team of educators, with parent/guardian and student input as appropriate, or when specified in the student’s individualized education program (IEP) or Section 504 plan.

**Accommodations** must be permitted on the ELPAC for all eligible students when specified in the student’s IEP or Section 504 plan.

**Unlisted resources** are non-embedded and made available if specified in the eligible student’s IEP or Section 504 plan and do not jeopardize test security, and only on approval by the CDE. An unlisted resource may change the construct being measured.

[Appendix 5.A](#_Appendix_5.A:_Accessibility) presents counts and percentages of students assigned designated supports, accommodations, and unlisted resources for the 2022–23 Summative ELPAC administration. The tables in [appendix 5.A](#_Appendix_5.A:_Accessibility) were created using student demographic data in the production data file updated on August 30, 2023.

The majority of students did not use any designated supports, accommodations, or unlisted resources.

#### Description of Differential Item Functioning Analyses

Differential item functioning (DIF) analyses are conducted to detect possible test bias by locating items for which one group of students performs significantly better than another group. DIF is a collection of statistical methods used to recognize whether performance varies across different groups of students (e.g., male versus female or White versus Black or African American). If an item performed differentially across student groups, even when students were matched on ability, the item may be measuring something other than the intended construct. Therefore, it is important to identify items flagged for DIF. Content experts and bias and sensitivity experts from diverse backgrounds reviewed these DIF-flagged items to determine the potential sources and meanings of performance differences. Refer to section [*8.3 Differential Item Functioning Analyses*](#_Toc120802591) for additional information about DIF.

### Scores

Individual student scores were reported for the 2022–23 Summative ELPAC administration. Student performance on the reporting scale was designated into one of the four performance levels described in subsection [*7.5.3 Performance Levels*](#_Performance_Levels_2). For information regarding score specifications and score reports, refer to [*Chapter 7: Scoring and Reporting*](#_Scoring_and_Reporting).

#### Score Reporting

TOMS is a secure website hosted by ETS that permits LEA users to manage aspects of ELPAC test administration such as test assignment and the assignment of test settings. TOMS also provides a secure means for LEA ELPAC coordinators to download Student Score Reports as PDF files.

Summative ELPAC scores can also be viewed through the California Educator Reporting System (CERS), a secure website that provides authorized users with interactive and cumulative online reports for domain scale scores and performance levels at the student, school, and LEA levels. CERS also provides individual score reports. Refer to subsection [*7.7.1 Online Reporting*](#_Online_Reporting_2) for details about TOMS and CERS and subsection [*7.7.3 Types of Score Reports*](#_Types_of_Score_1) for the content of each type of score report.

#### Aggregation Procedures

To provide meaningful results to interested educators, Summative ELPAC scores for a given grade-level assessment were aggregated at the school, LEA or direct funded charter school, county, and state levels. State-level results are available on the Test Results for California’s Assessments website. The aggregated scores were presented for all students or selected demographic student groups.

Aggregated scores were generated by combining student scores at the state, LEA or direct funded charter school, or school level; combining student scores for all students; or by combining student scores for students who represent selected demographic student groups.

The aggregation procedures used to present Summative ELPAC results are described in section [*7.6 Overview of Score Aggregation Procedures*](#_Toc120802156). Aggregated results by demographic variables are presented in [appendix 7.D](#_Appendix_7.D:_Means). In table 7.D.1 through table 7.D.13, students are grouped by demographic groups, including gender, ethnicity, English language fluency, disability status, and economic status, as well as crosstab analysis for ethnicity and economic status. The tables show the numbers of students with valid scores in each group, scale score means and standard deviations, and the percentage of students in each performance level. To protect student privacy, statistics are presented in the tables as “N/A” when the number of students in the sample is 10 or fewer. Definitions for the demographic student groups included in these tables are provided in table 7.11.

### Psychometric Analyses

Psychometric analyses were conducted on the data from the Summative ELPAC, including classical item analyses, DIF analyses, item response theory (IRT) calibration and linking, testing time analyses, and reliability analyses. The results of these analyses support understanding of item performance and internal structure of the assessment and provide validity evidence for both response processes and scoring. Detailed descriptions of these analyses are presented in [*Chapter 8: Psychometric Analyses*](#_Psychometric_Analyses).

#### Description of Classical Item Analyses

The psychometric analyses for the Summative ELPAC data included classical item analyses and DIF analyses to evaluate the performance of the operational items and the embedded field test items. The classical item analyses included the computation of item difficulty indices, the item-total correlation indices, the omission rate of each item, and the proportion of test takers obtaining each score point for polytomous items. CDE-approved flagging rules based on these statistics identified items that were not performing as expected. A description of the classical item analyses procedure is provided in section [*8.2 Classical Item Analyses*](#_Classical_Item_Analyses)*.* A description of the DIF analyses procedure is provided in section [*8.3 Differential Item Functioning Analyses*](#_Toc120802591)*.*

#### Description of Item Response Theory Analyses

IRT is used to calibrate items, link item parameter estimates, scale or equate test scores across different forms or test administrations, evaluate item performance, build an item bank, and assemble test forms. Detailed information on the models and the procedures for the calibration and linking analyses are included in section [*8.4 Item Response Theory Analyses*](#_Item_Response_Theory).

### References

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## Item Development and Review

This chapter discusses the detailed procedures of item development for the 2022–23 Summative English Language Proficiency Assessments for California (ELPAC) administration.

### Overview

The 2022–23 Summative ELPAC followed the same Summative ELPAC test blueprints (California Department of Education [CDE], 2019b) and high-level test design (CDE, 2019a) that were developed and implemented in the 2019–20 Summative ELPAC. Operational items on the 2022–23 Summative ELPAC were field-tested during previous administrations of the computer-based Summative ELPAC; this field testing began in fall 2019.

In addition, approximately 350 new items were developed for possible use as embedded field test items in the 2022–23 Summative ELPAC or a future form. All newly developed items were reviewed to ensure that they contained appropriate content and accurate formatting before they were administered as field test items.

### Summative ELPAC Test Blueprints

The 2022–23 Summative ELPAC aligned to the test blueprints approved by the California State Board of Education in May 2019 for the computer-based Summative ELPAC (CDE, 2019b).

The test blueprints provide information about the number of items and points that are administered per task type within each grade level and domain. The test blueprints also provide two types of alignment between task types and the standards: “primary” and “secondary.” Primary alignment indicates there is a close or strong match in terms of the language knowledge, skills, and abilities covered by both the task type and the standard. Secondary alignment indicates that there is a moderate or partial match between the standard and the item in terms of language knowledge, skills, and abilities.

### Guidelines

In partnership with the Sacramento County Office of Education (SCOE), ETS convened ELPAC item writer workshops (IWWs) and item review meetings (IRMs) to develop test items for the Summative ELPAC. California educators were selected and trained in previous years to write new items for the Summative ELPAC. In addition, ETS trained a small group of experienced contractors to draft Summative ELPAC items. After the items went through ETS internal and CDE reviews, California educators reviewed the items during IRMs.

This section describes how California educators were selected and the process used to develop new items in 2021–22. Some of these items were used as embedded field test items in the 2022–23 Summative ELPAC.

#### Recruitment and Selection of Item Writers and Reviewers

California educators were recruited for the fall 2022 ELPAC IWW through the online Educator Opportunities Portal and email communications. To ensure broad representation, the CDE sent an email message announcing the opportunities to write items and to review items to the following groups:

* The CDE’s Assessment Spotlight listserv (includes local educational agency [LEA] ELPAC coordinators and interest holders who subscribe)
* Title III LEAs using the CDE Multilingual Update listserv
* The Bilingual Coordinators Network

Applications were solicited at the various interest-holder conferences and meetings.

The email directed applicants to submit an online application through the Educator Opportunities Portal. The application allowed California educators to apply for any number of the events. The information from the application was loaded into a database that was used for the review and selection process.

Applications were selected from current and retired California educators who had the following minimum qualifications:

* Bachelor’s degree
* Expertise in language acquisition or experience teaching English learner (EL) students in kindergarten through grade twelve (K–12)
* Knowledge of, and experience working with, the 2012 *California English Language Development Standards: Kindergarten Through Grade 12* (2012 ELD Standards)

Additional desirable qualifications included the following:

* A teaching credential authorization for English language development, specially designed academic instruction in English, or content instruction delivered in the primary language (e.g., Crosscultural, Language, and Academic Development Certificate; or Bilingual, Crosscultural, Language, and Academic Development Certificate)
* Specialized teaching certification in reading (e.g., Reading Certificate or Reading and Language Arts Specialist Certificate)
* Experience writing or reviewing test items for standardized assessments, especially assessments for EL students in K–12
* Current experience administering the ELPAC

Selections were made to ensure representation from different cultural and linguistic groups, various-sized LEAs, county offices of education, and different geographical regions of the state. ETS and SCOE made preliminary selections, which were reviewed by the CDE, adjusted as needed, and then approved. Thirty-three educators participated in the ELPAC IWW.

Table 3.1 shows the self-reported educational qualifications, present occupation, and credentials of the individuals who participated in an ELPAC IWW.

Table 3.1 ELPAC IWW Qualifications

|  |  |  |
| --- | --- | --- |
| **Qualification Type** | **Qualification** | **Total** |
| Occupation | Classroom Teacher | 18 |
| Occupation | EL or Literacy Coach | 4 |
| Occupation | LEA or County Office Employee | 4 |
| Occupation | Special Education Teacher | 3 |
| Occupation | School Administrator | 1 |
| Occupation | Speech Therapist or Pathologist | 0 |
| Occupation | Teacher on Special Assignment | 3 |
| Special Education Services | Teacher of Students with Visual Impairments (TVI) or Visual Impairments (VI) Experience | 4 |
| Highest Degree Earned | Bachelor’s Degree | 8 |
| Highest Degree Earned | Master’s Degree | 22 |
| Highest Degree Earned | Doctorate | 3 |
| K–12 Teaching Credential | Elementary Teaching (multiple subjects) | 20 |
| K–12 Teaching Credential | Secondary Teaching (single subject) | 11 |
| K–12 Teaching Credential | Special Education | 3 |
| K–12 Teaching Credential | EL (Crosscultural, Language, and Academic Development; Bilingual, Crosscultural, Language, and Academic Development) | 13 |
| K–12 Teaching Credential | Administrative | 6 |
| K–12 Teaching Credential | Other (School Psychologist, Early Childhood, Education Leadership, Pupil Personnel Services) | 4 |
| Area of State | Northern | 9 |
| Area of State | Southern | 19 |
| Area of State | Central | 5 |
| Region Type | Urban | 20 |
| Region Type | Suburban | 10 |
| Region Type | Rural or Town | 2 |
| **Total Participants:** | **N/A** | **33** |

**Note:** Numbers may not match the totals because participants may have multiple occupations or teaching credentials or are currently working toward earning their highest degree. The information is self-reported and may not reflect all their experience and earned credentials.

#### Item Writing by Educators

Items developed by California educators during the IWW held during September 27–29 and October 4–6, 2022, contributed to the new item development that supported the embedded field testing on future administrations of the Summative ELPAC.

##### Introduction to Item Writing

During the virtual fall 2022 IWW, educators received training and then drafted ELPAC items. At the start of day one, a PowerPoint presentation was used to provide information to the educators about topics regarding the ELPAC and item development. Topics covered during the presentation included an overview of the ELPAC, general principles of item development, a review of the 2012 ELD Standards, the overall item development process, and the process for drafting and submitting items.

ETS’ trainers facilitated brainstorming sessions, during which educators listed topics that served as a basis for item development. Educators were asked to propose topics for item content that are covered during prior grade levels to ensure that topics were appropriate. Educators also worked in groups to draft items. This pattern was followed for all domains (Listening, Speaking, Reading, and Writing).

##### Process

ETS’ trainers provided educators with *Item Writing Guidelines for the ELPAC* (CDE, 2022), sample items, and item templates. The *Item Writing Guidelines for the ELPAC* provided details about the type of information that is required when drafting items, such as the length of any Listening stimuli or Reading passages, the number of items within the set, and the types of English language knowledge, skills, and abilities to be assessed by the items.

The sample items were from the ELPAC practice test and were used to serve as examples of the task types to be developed. The item templates were Word files that contained areas for entering information. The item templates assured that items were drafted in a standardized manner and that all needed item information was entered. ETS’ trainers used the *Item Writing Guidelines for the ELPAC*, sample items, and item templates as training materials to provide clear expectations regarding the information needed when drafting each task type, as well as the level of quality that was expected.

All items developed by educators were drafted according to assignments that were given during the IWWs. Educators were not given assignments to be completed after the meetings.

#### Item Writing by Contractors

In 2022, ETS’ assessment specialists worked with a small group of contractors (i.e., outside item writers) who were fully trained, experienced item writers with a record of developing quality items for other ETS English language proficiency (ELP) assessments. These contractors developed items in accordance with the *Item Writing Guidelines for the ELPAC* (CDE, 2022).

#### Item Writer Training

Item writer training is a vital part of establishing the validity chain for item and task development. In addition to relying on internal item writing experts for the Summative ELPAC, ETS recruited and trained educators in the 2012 ELD Standards.

The three primary goals for the training were to

1. provide teachers with knowledge, via professional development on writing items, that they can use to help develop or refine their own classroom teaching and assessments;
2. ensure that teachers who successfully completed the training were ready to develop high-quality items for the Summative ELPAC; and
3. leverage the experiences, perspectives, and expertise of the teachers in writing items for the Summative ELPAC.

ETS held item writer training workshops to provide prospective item writers with professional development in several areas. A review of the general assessment development process gave trainees a sense of the total life cycle of an item.

Participants learned best practices in item writing to provide clarity within the item and avoid bias or sensitivity concerns, learned how to review a passage for item opportunities, and were introduced to how the new, innovative item types work.

Given that the trainees were California educators and educational leaders, ETS also emphasized incorporation of current effective teaching practices and instructional activities. Small-group and individual work generated sample items that the ETS facilitators then used in a large-group discussion to analyze and ascertain overall item quality. The ETS team also provided post hoc feedback via email and phone calls to trained item writers on further item samples and ideas submitted ahead of contractual item submissions.

### Task Types and Features

#### Task Types

The operational administration of the Summative ELPAC contained 27 task types. Each task type required a student to perform an activity to elicit information about the student’s ELP and had one or more items that aligned with the 2012 ELD Standards (CDE, 2014). While the 2012 ELD Standards are organized according to three modes of communication (collaborative, interpretive, and productive communication), federal Title I requirements of the Every Student Succeeds Act (ESSA) of 2015 call for scores to be reported according to the four language domains of Listening, Speaking, Reading, and Writing (ESSA, 200.6[h][1][ii]).

Across all of the grade levels and grade spans, the Listening domain of the Summative ELPAC had five task types, the Speaking domain had six task types, the Reading domain had nine task types, and the Writing domain had seven task types. When a task type required the use of integrated language skills, such as Listening and Speaking, the task type was classified according to the language skill used to provide the response. For instance, the task type *Summarize an Academic Presentation* required a student to listen to a presentation and then summarize the presentation by speaking to the test examiner. Because the student provided the summary as a spoken response, the task type was classified as a Speaking task type.

The next subsections summarize the task types used to assess ELP within each domain of the Summative ELPAC on the basis of the *Item Writing Guidelines for the ELPAC* (CDE, 2022). A full description of each task type is available in the *Definitions of Task Types for the English Language Proficiency Assessment for California* (CDE, 2020).

##### Listening

Listening task types assessed the ability of an EL student to comprehend spoken English (conversations, discussions, and oral presentations) in a range of social and academic contexts. Students listened to a stimulus and then demonstrated their ability to listen actively by responding to multiple-choice (MC) items. Students heard audio recordings of the Listening stimuli.

##### Speaking

Speaking task types assessed the ability of an EL student to express information and ideas and to participate in grade-level conversations and class discussions. All task types included one or more constructed-response (CR) items. Test examiners scored student responses in the moment using scoring rubrics.

##### Reading

Reading task types assessed the ability of an EL student to read, analyze, and interpret a variety of grade-appropriate literary and informational texts. For kindergarten, the Reading domain was scaffolded, as these students are beginning to develop their print literacy. Words and stories were read together, and then students were asked to respond to items about the text. For grades one through twelve, students read a text and then demonstrated their print literacy skills by responding to MC items.

##### Writing

Writing task types assessed the ability of an EL student to write literary and informational texts to present, describe, and explain information. All task types included one or more CR items. Student responses were scored by ETS’ scorers and raters.

### ETS Item Review Process

After items were drafted, ETS placed items developed for the Summative ELPAC through an extensive internal item review process designed to provide the best standards-based assessments possible. This section summarizes the item review process that confirmed the quality of Summative ELPAC items.

#### Overview

Once an item was accepted for authoring, ETS employed a series of internal reviews. These reviews used established criteria to judge the quality of item content and to ensure that each item measured what it was intended to measure. These internal reviews also examined the overall quality of the items ahead of their being reviewed by the CDE and by educators at IRMs, which are described in more detail in section [*3.7 California Educator Review*](#_California_Educator_Review_3).

All items were entered into the Item Banking Information System (IBIS) with corresponding artwork and metadata. Within IBIS, items received content reviews by ETS’ assessment specialists and fairness and editorial reviews by ETS’ editors and fairness reviewers.

The CDE reviewed proposed changes to items in response to reviews by the participants of the IRMs to ensure the quality of the item pool. The CDE then gained access to Summative ELPAC items and conducted reviews in IBIS. ETS revised items in response to comments from the CDE prior to using them in the assessment forms.

The ETS review process for the Summative ELPAC includes the following; these tasks are described in the next subsections:

1. Content review
2. Accessibility review
3. Editorial review
4. Sensitivity and fairness review

Throughout this multistep item review process, the lead domain assessment specialists and development team members at ETS continually evaluated the activities and items for adherence to the rules for item development.

#### ETS Content Review

On all items ETS developed, domain assessment specialists conducted three reviews on items and stimuli. These assessment specialists verified thatthe items and stimuli were in compliance with ETS’ written guidelines for clarity, style, accuracy, and appropriateness for California students and were also in compliance with the approved item specifications, the *California Assessment of Student Performance and Progress and ELPAC Item Review Acceptance Criteria* (ETS, 2019), and other ETS-produced procedures such as the ETS guidelines for fair tests and communications (2016). Assessment specialists reviewed each item in terms of the following characteristics:

* Relevance to the purpose of the assessment
* Match of each item to the item specifications, including the tier of item complexity
* Match of each item to the principles of quality item writing
* Match of each item to the identified standard or standards
* Difficulty of the item
* Accuracy of the content of the item
* Readability of the item or passage
* Grade-level and grade-span appropriateness of the item
* Appropriateness of any illustrations, graphs, or figures

Assessment specialists verified the classification of each item, both to evaluate the correctness of the classification and to confirm that the task posed by the item was relevant to the outcome it was intended to measure. The reviewers could accept the item and classification as written, suggest revisions, or recommend that the item be discarded. These steps occurred prior to the CDE’s review.

#### ETS Accessibility Review

The ETS Accessible Content & Inclusive Solutions team advised on accessibility of items and item types during the ETS content review. These experts on alternate test formats reviewed all items, with a focus on accessibility for all student populations, and provided potential refinement solutions to improve the accessibility in items and assessments.

#### ETS Editorial Review

After assessment specialists and researchers reviewed each item, a group of specially trained editors also reviewed each item in preparation for consideration by the CDE and the item review panelists. The editors checked items for clarity, correctness of language, appropriateness of language for the grade level or grade span assessed, adherence to the style guidelines, and conformity with accepted item-writing practices.

#### ETS Sensitivity and Fairness Review

ETS’ assessment specialists who were specially trained to identify and edit or eliminate items that contained content or wording that could be construed to be offensive to, or biased against, members of specific student groups (e.g., ethnicity, race, or gender) conducted the next level of review (ETS, 2014, 2016). These trained staff members reviewed every item before the CDE and IRMs. Newly developed items were then submitted to the CDE for review prior to educator reviews.

The review process promoted a general responsiveness to the following:

* Cultural diversity
* Diversity of background, cultural tradition, and viewpoints to be found in the test-taking populations
* Changing roles and attitudes toward various groups
* Role of language in setting and changing attitudes toward various groups
* Topics that may be unsettling or otherwise distract the student from the content being measured, such as natural disasters, disease, or family discord
* Contributions of diverse groups (including ethnic and minority groups, individuals with disabilities, and women) to the history and culture of the United States and the achievements of individuals within these groups
* Item accessibility for language learners of diverse backgrounds

### California Department of Education Review

After ETS reviews of items were completed, the items were reviewed by the CDE content teams. CDE content experts reviewed the items using the same criteria used in the ETS reviews. After CDE reviews occurred, ETS made edits to the items based on the CDE feedback, and the items were then finalized for IRMs with California educators.

### California Educator Review

Each newly developed item was reviewed during the IRMs, held February 2–23, 2023, and March 30–April 25, 2023. Thirty-five educators participated in the meetings to review the items for alignment to the standard(s) and appropriateness for the designated grade level or grade span.

Educators had the option of making one of three recommendations regarding each item: approve the item as is, approve the item with revisions, or reject the item. Whenever an item was approved with revisions, educators specified the revisions needed to text or images and the reasons for the proposed revisions.

Table 3.2 shows the number of items that were developed for 2022–23 and taken to IRMs in spring 2023.

Table 3.2 **Number of Field Test Items Developed for** 2022–23

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Domain** | **K** | **1** | **2** | **3–5** | **6–8** | **9–10** | **11–12** | **Total** |
| Listening | 4 | 9 | 3 | 14 | 20 | 14 | 20 | 84 |
| Speaking | 3 | 0 | 1 | 16 | 7 | 9 | 13 | 49 |
| Reading | 0 | 3 | 14 | 41 | 33 | 45 | 31 | 167 |
| Writing | 16 | 12 | 6 | 6 | 6 | 3 | 2 | 51 |
| **Total:** | **23** | **24** | **24** | **77** | **66** | **71** | **66** | **351** |

Table 3.3 provides the status of the items after the spring 2023 IRMs.

Table 3.3 Status of Items After the 2023 IRMs

|  |  |  |  |
| --- | --- | --- | --- |
| **Grade Level or Grade Span** | **Approved As Is** | **Approved with Revisions** | **Rejected** |
| Kindergarten | 15 | 8 | 0 |
| 1 | 11 | 13 | 0 |
| 2 | 9 | 15 | 0 |
| 3–5 | 52 | 25 | 0 |
| 6–8 | 45 | 21 | 0 |
| 9–10 | 37 | 34 | 0 |
| 11–12 | 39 | 27 | 0 |
| **Total:** | **208** | **143** | **0** |

In spring 2023, 100 percent of the 351 items were approved by educators during the IRMs for field-testing on the 2022–23 Summative ELPAC forms or future forms.

#### California Educators as Content Experts

ETS holds meetings annually with California educators at the end of the item review process as the final content-expert review that items must undergo before being placed on the Summative ELPAC. The California educators served in an advisory role to the CDE and ETS and provide guidance on matters related to item development for the Summative ELPAC.

These educators were responsible for reviewing all newly developed items for alignment with the 2012 ELD Standards. Meeting participants also reviewed the items for accuracy of content, clarity of phrasing, and overall quality. In their examination of items, participants could raise concerns related to grade-level or grade-span appropriateness as well as gender, racial, ethnic, or other fairness concerns.

#### Composition of Item Review Panels

California educators were recruited for the 2023 ELPAC IRM through the same methods and required qualifications as outlined in subsection [*3.3.1 Recruitment and Selection of Item Writers and Reviewers*](#_Recruitment_and_Selection). Educators who participated in the IWW were not selected to participate to review the same grade level or grade span items for the IRM.

The panelists for typical item reviews for Summative ELPAC items included current teachers, resource specialists, administrators, curricular experts, and other education professionals. Selections were made to ensure representation from different cultural and linguistic groups, various-sized LEAs, county offices of education, and different geographical regions of the state. ETS and SCOE made preliminary selections, which were reviewed by the CDE, adjusted as needed, and then approved. Thirty-five educators participated in the 2023 IRM.

Table 3.4 describes the self-reported qualifications for the panelists.

Table 3.4 ELPAC IRM Qualifications

|  |  |  |
| --- | --- | --- |
| **Qualification Type** | **Qualification** | **2023 IRM** |
| Occupation | Classroom Teacher | 11 |
| Occupation | EL or Literacy Coach | 9 |
| Occupation | LEA or County Office Employee | 2 |
| Occupation | Special Education Teacher | 4 |
| Occupation | School Administrator | 3 |
| Occupation | Teacher on Special Assignment | 6 |
| Special Education Services | TVI or VI Experience | 8 |
| Highest Degree Earned | Bachelor’s Degree | 5 |
| Highest Degree Earned | Master’s Degree | 27 |
| Highest Degree Earned | Doctorate | 3 |
| K–12 Teaching Credential | Elementary Teaching (multiple subjects) | 16 |
| K–12 Teaching Credential | Secondary Teaching (single subject) | 15 |
| K–12 Teaching Credential | Special Education | 4 |
| K–12 Teaching Credential | EL (Crosscultural, Language, and Academic Development; Bilingual, Crosscultural, Language, and Academic Development) | 15 |
| K–12 Teaching Credential | Administrative | 7 |
| K–12 Teaching Credential | Other (Masters Educational Leadership, Early Childhood) | 3 |
| Area of State | Northern | 9 |
| Area of State | Southern | 20 |
| Area of State | Central | 6 |
| Region Type | Urban | 13 |
| Region Type | Suburban | 17 |
| Region Type | Rural or Town | 5 |
| **Total Participants:** | **N/A** | **35** |

**Note:** Numbers may not match the totals because participants may have multiple occupations or teaching credentials or are currently working toward earning their highest degree. The information is self-reported and may not reflect all their experience and earned credentials.

SCOE contacted and invited the participants and contacted the alternates as necessary. Alternates were contacted when confirmed participants cancelled and there was sufficient time to fill the opening. Once all participants confirmed, SCOE notified those who were not selected.

#### Meetings for Review of Summative ELPAC Field Test Items

ETS’ assessment specialists facilitated Summative ELPAC IRMs. The meetings began with a brief training session on how to review and make recommendations for revising items.

ETS provides training on the following topics:

* Overview of the purpose and scope of the Summative ELPAC
* Overview of the Summative ELPAC design specifications
* Overview of criteria for evaluating test items
* Review and evaluation of items for fairness concerns

The criteria for reviewing items include the following:

* Overall quality
* Alignment with the construct being assessed by the standard
* Linguistic difficulty range
* Clarity
* Correctness of the answer
* Plausibility of the distractors
* Bias and sensitivity factors

ETS provides guidelines for reviewing items, which the CDE approves. The set of guidelines for reviewing items is summarized as follows:

* Does the item align with the ELD Standard it was designed to assess?
* Is the language in the item simple, direct, and free of ambiguity? Are jargon and idioms avoided?
* Are all components of the item clearly written and accessible to students?
* Are the directions written clearly and simply enough for students to understand what they are being asked to do?
* Is the item free of potentially upsetting or offensive graphics or content?
* Does the item follow the principles of universal design?

Once ETS’ staff compile and review the panel’s feedback, the feedback is delivered to the CDE for further review and guidance on decisions on whether to field-test the items.

### Data Review Meeting

The data review meeting (DRM) for the 2022–23 Summative ELPAC administration occurred over four days, on May 9, May 11, May 16, and May 18, 2023. After items were administered to students, ETS prepared the items and the associated statistics for review by the CDE and California educators.

#### Composition of Data Review Panels

The panelists for typical data reviews for Summative ELPAC items align with the qualifications outlined for the IWW, in subsection [*3.3.1 Recruitment and Selection of Item Writers and Reviewers*](#_Recruitment_and_Selection).

Selections were made to ensure representation from different cultural and linguistic groups, various-sized LEAs, county offices of education, and different geographical regions of the state. ETS and SCOE made preliminary selections, which were reviewed by the CDE, adjusted as needed, and then approved. Thirty-five educators participated in the 2023 DRMs.

Table 3.5 describes the self-reported qualifications for the panelists.

Table 3.5 ELPAC DRM Qualifications

|  |  |  |
| --- | --- | --- |
| **Qualification Type** | **Qualification** | **2023 DRM** |
| Occupation | Classroom Teacher | 21 |
| Occupation | EL or Literacy Coach | 4 |
| Occupation | LEA or County Office Employee | 4 |
| Occupation | Special Education Teacher | 1 |
| Occupation | School Administrator | 1 |
| Occupation | Teacher on Special Assignment | 4 |
| Special Education Services | TVI or VI Experience | 7 |
| Highest Degree Earned | Bachelor’s Degree | 8 |
| Highest Degree Earned | Master’s Degree | 24 |
| Highest Degree Earned | Doctorate | 3 |
| K–12 Teaching Credential | Elementary Teaching (multiple subjects) | 23 |
| K–12 Teaching Credential | Secondary Teaching (single subject) | 13 |
| K–12 Teaching Credential | Special Education | 2 |
| K–12 Teaching Credential | EL (Crosscultural, Language, and Academic Development; Bilingual, Crosscultural, Language, and Academic Development) | 14 |
| K–12 Teaching Credential | Administrative | 7 |
| K–12 Teaching Credential | Other (Teachers of English to Speakers of Other Languages, Early Childhood) | 4 |
| Area of State | Northern | 8 |
| Area of State | Southern | 19 |
| Area of State | Central | 8 |
| Region Type | Urban | 18 |
| Region Type | Suburban | 14 |
| Region Type | Rural or Town | 5 |
| **Total Participants:** | **N/A** | **35** |

**Note:** Numbers may not match the totals because participants may have multiple occupations or teaching credentials or are currently working toward earning their highest degree. The information is self-reported and may not reflect all their experience and earned credentials.

During the DRM for the Summative ELPAC, review materials included items with their statistical data and statistical flags based on the respective administration’s item analyses along with annotated comment sheets for use by reviewers. Educators who were part of the DRM were assigned a training video in Upskill—a centralized, online location for training materials—giving them an overview of what is involved in a DRM as well as an understanding of the statistical measures used to review the items. This was followed by ETS conducting an introductory training at the beginning of the meeting to highlight any issues and to serve as a statistical refresher.

Reviewers then made decisions about which items should be included in the item bank for future operational forms assembly. Reviewers could determine items are accepted as is or rejected for operational use on a form. If an item was considered problematic and not to be included in the item bank, it could be deactivated and removed from the item bank. ETS’ psychometric and content staff were available to reviewers throughout this process. These results are presented in table 8.2.

ETS’ content staff facilitated the meeting, confirming that all educators gave input to confirm whether there were any reasons to be concerned about the content of the flagged items. ETS’ psychometricians provided training on the interpretation of item statistics and responded to questions about the item statistics during the item discussion. The DRM participants reviewed the content and statistics of each item that was flagged and then made a recommendation to accept or reject an item. Out of the 275 items that were field-tested in the 2022–23 Summative ELPAC, 234 items fell within the acceptable statistical ranges, while 41 items were flagged for statistical performance and reviewed at the DRM.

ETS’ content staff recorded the participants’ recommendations and comments regarding the flagged items. The feedback was referenced when working with the CDE to reconcile educator feedback and to make a final decision on whether to include particular flagged items in the operational pool. Five items out of 41 items flagged were rejected as a result of the DRM. These rejected items were removed from the item bank and are not available for operational use on future Summative ELPAC forms. The accepted items were placed in the operational item bank and made available for future refreshing of the Summative ELPAC forms.

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## Test Assembly

This chapter discusses the detailed procedures of test assembly for the 2022–23 Summative English Language Proficiency Assessments for California (ELPAC) administration.

### Overview

ETS’ assessment specialists assembled the Summative ELPAC, which was reviewed and approved by the California Department of Education (CDE). This process began with the creation of form assembly specifications, which described the content characteristics, psychometric characteristics, and quantity of items to be used in the operational 2022–23 Summative ELPAC. ETS created the form assembly specifications that the CDE reviewed and approved.

#### Process

After the form assembly specifications were approved, ETS’ assessment specialists assembled the assessments according to the specifications. ETS’ assessment specialists and psychometricians reviewed the form planners before they were delivered to the CDE for review. The CDE reviewed and approved the form planners after ETS revised the form planners as needed.

#### Automated Test Assembly

Beginning with the 2022–23 test administration, automated test assembly (ATA) methods were used to assemble the first version of the operational form for each grade level and composite of the Summative ELPAC. ATA is an algorithmic process by which the optimal set of items can be selected subject to a set of constraints. An ATA user defines optimal parameters and specifies the appropriate constraints.

For test assembly purposes, “optimal” is usually defined as providing the highest level of test information at one or more predetermined, theoretically important values of the latent trait variable, theta. As test information is directly related to measurement precision, this means selecting items that provide the best measurement precision possible near the theta score corresponding to the cut score between Performance Level 3 (PL3) and Performance Level 4 (PL4). The constraints are defined by blueprint requirements, psychometric considerations (e.g., average form-level difficulty), and form refresh requirements. ATA also provides a means of increasing the form-level difficulty by constraining the cut between PL3 and PL4 to be within certain raw score point bounds, assuming that the item bank can support such a constraint on the assessment.

ATA provides a significant improvement in form development because it guarantees that performance level classification is as accurate as possible—given the constraints on the assessment and the depth of the item bank—while also attempting to address any potential concerns over form difficulty.

### Test Forms

Each grade level and grade span of the 2022–23 Summative ELPAC had a form with operational items only and field test forms that contained both operational items and embedded field test items. Form 1 contained operational items only, while forms 2, 3, 4, 5, and 6 had operational items and embedded field test items. Form 1 was developed for each of the seven grade levels and grade spans: kindergarten, grade one, grade two, grade span three through five, grade span six through eight, grade span nine and ten, and grade span eleven and twelve. Form 7 contained operational items along with twinned items for braille to which students who required the braille accommodation were routed.

Table 4.1 provides an overview of the number of operational items and points by domain and grade level or grade span.

Table 4.1 Overview of Operational Items and Points by Domain and Grade Level or Grade Span

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Domain** | **Kindergarten: Items** | **Kindergarten: Points** | **Grade 1: Items** | **Grade 1: Points** | **Grade 2: Items** | **Grade 2: Points** | **Grade Span 3–5: Items** | **Grade Span 3–5: Points** | **Grade Span 6–8: Items** | **Grade Span 6–8: Points** | **Grade Span 9–10: Items** | **Grade Span 9–10: Points** | **Grade Span 11–‍12: Items** | **Grade Span 11–‍12: Points** |
| Listening | 20 | 20 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 |
| Speaking | 9 | 22 | 9 | 22 | 12 | 28 | 12 | 30 | 12 | 30 | 12 | 30 | 12 | 30 |
| Reading | 14 | 17 | 21 | 21 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 |
| Writing | 8 | 12 | 7 | 17 | 6 | 17 | 6 | 17 | 6 | 17 | 6 | 17 | 6 | 17 |
| **Total:** | 51 | 71 | 59 | 82 | 66 | 93 | 66 | 95 | 66 | 95 | 66 | 95 | 66 | 95 |

Items that were selected for the operational form (Form 1) were drawn from previously embedded field test items on the Summative ELPAC. For all grade levels and grade spans, the 2022–23 Summative ELPAC forms involved an approximately 30 percent of the items on Form 1 of the 2021–22 Summative ELPAC were replaced as outlined in the *Form Assembly Specifications for the 2022–‍2023 Summative English Language Proficiency Assessments for California* (ETS, 2022).

The operational items were initially selected using ATA to maximize measurement precision at the theta scale around the cut score between PL3 and PL4 while simultaneously satisfying all blueprint, psychometric, and refresh requirements. Subsection [*4.1.2 Automated Test Assembly*](#_Automated___1) includes more details about the ATA procedures.

After the preliminary operational forms were assembled, ETS’ Assessment & Learning Technology Development staff reviewed them for content considerations and the Psychometric Analysis & Research (PAR) team checked them for psychometric considerations. Individual item replacements were made, if necessary. Content and psychometric considerations focused on

* replacing items because of previous statistical performance;
* balancing the topics and content within all the domains to ensure a variety;
* using items and task types with the best operational data from field testing; and
* limiting the exposure of items, with the goal to refresh each item and set in the domains over the course of two to three years depending on statistical performance of field test items.

After Form 1 for each grade level and grade span was assembled, the embedded field test forms were assembled. Five additional forms with embedded field test items (i.e., forms 2, 3, 4, 5, and 6) were developed for all grade levels and grade spans.

During the 2022–23 Summative ELPAC administration, the field test forms were used to field-test new items at all grade levels and grade spans. The purpose of the embedded field test items was to refresh the operational Summative ELPAC.

The embedded field test items were developed for each grade level and grade span as forms 2, 3, 4, 5, and 6. Each of these forms included all the items from the approved operational form (Form 1) plus field test (FT) items from only one domain, as described in table 4.2. Note, too, that each Speaking item has a student-facing item, represented in the *Speaking* column, and a corresponding Speaking Data Entry Interface (DEI) item for data entry. The DEI was used by test examiners to enter student scores.

Table 4.2 Organization of 2022–23 Summative ELPAC Test Forms

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Form Number** | **Listening** | **Speaking** | **Reading** | **Writing** |
| Form 1 | Operational items only | Operational items only | Operational items only | Operational items only |
| Form 2 | Form 1 items + embedded FT items | Form 1 items | Form 1 items | Form 1 items |
| Form 3 | Form 1 items | Form 1 items + embedded FT items | Form 1 items | Form 1 items |
| Form 4 | Form 1 items | Form 1 items | Form 1 items + embedded FT items | Form 1 items |
| Form 5 | Form 1 items | Form 1 items | Form 1 items + embedded FT items | Form 1 items |
| Form 6 | Form 1 items | Form 1 items | Form 1 items | Form 1 items + embedded FT items |
| Form 7 (braille version of Form 1 from 2020–21) | Braille twins + operational items | Braille twins + operational items | Braille twins + operational items | Braille twins + operational items |

Table 4.3 shows the number of embedded field test items that appeared in the 2022–23 Summative ELPAC by domain and grade level or grade span.

Table 4.3 Number of Embedded Field Test Items in the 2022–23 Summative ELPAC

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Domain** | **K** | **1** | **2** | **3–5** | **6–8** | **9–10** | **11–12** | **Total** |
| Listening | 10 | 11 | 11 | 11 | 8 | 11 | 11 | 73 |
| Speaking | 4 | 4 | 6 | 6 | 6 | 6 | 6 | 38 |
| Reading | 14 | 21 | 26 | 17 | 17 | 23 | 24 | 142 |
| Writing | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 22 |
| **Total:** | **32** | **39** | **46** | **37** | **34** | **43** | **44** | **275** |

The total number of items field-tested was 275, which included 73 Listening items, 38 Speaking items, 142 Reading items, and 22 Writing items. Sources for the embedded field test items included converted items from the paper–pencil 2017–18 Summative ELPAC, previously approved field test–ready items that had not yet been field-tested, and items reviewed and approved at the spring 2022 item review meeting.

Preference for field test slots was given to task types that were targeted for the 30 percent refresh of the Summative ELPAC along with meeting other needs to support the health of the operational bank. Items that were used as embedded field test items in the 2022–23 Summative ELPAC are available for use as operational items as early as the 2023–24 Summative ELPAC administration.

### Special Version Forms

Items that appeared in the 2022–23 Summative ELPAC had a full set of accessibility resources as described in the California Assessment Accessibility Resources Matrix (CDE, 2022). The 2022–23 Summative ELPAC had the full set of universal tools, designated supports, and accommodations that were available in the test delivery system (TDS). Descriptions of these features are provided in section [*5.6 Accessibility Resources*](#_Accessibility_Resources_1). Table 5.A.1 through table 5.A.8 in [appendix 5.A](#_Appendix_5.A:_Accessibility) list the available accommodations and student usage.

Assessment specialists from ETS’ Accessibility and Alternate Formats team reviewed the 2022–23 Summative ELPAC and collaborated with content staff to determine appropriate adaptations and ensure that appropriate content to support the accommodations was created and uploaded in the Item Banking Information System. The accessibility resources were imported into the TDS, along with other item content, and prepared for computer-based delivery. ETS checked the accessibility resources to ensure that each functioned correctly during the user acceptance testing (UAT) process. Any needed revisions to accessibility resources that were identified during UAT were applied prior to the release of the 2022–23 Summative ELPAC.

#### Braille Form

The braille form, also referred to as Form 7, was a reuse of the braille form from the 2020–‍21 Summative ELPAC administration. This form was aligned to the same blueprint as Form 1, the *Test Blueprints for the* *Summative English Language Proficiency Assessments for California* (CDE, 2019). ETS originally created a variant of Form 1 of the 2020–21 Summative ELPAC where some items were twinned items to meet the accessibility needs of the population of students with visual impairments. The following task types required twinning to make them accessible:

* *Speaking—Talk About a Scene:* Kindergarten through grade twelve
* *Reading—Read Along Word with Scaffolding:* Kindergarten
* *Reading—Read and Choose a Word:* Grade one
* *Reading—Read and Choose a Sentence:* Grades one through five
* *Writing—Label a Picture–Word, with Scaffolding:* Kindergarten
* *Writing—Write a Story Together with Scaffolding:* Kindergarten through grade two
* *Writing—Write an Informational Text:* Grades one and two
* *Writing—Write and Describe a Picture:* Grades one through twelve
* *Writing—Write About an Experience:* Administered at grades one through twelve, but braille versions were created only for grades one and two

The item construct and overall cognitive complexity of braille twins were maintained as closely as possible with the original parent item.

#### Emergency Paper–Pencil Form

The 2022–23 Summative ELPAC administration included a paper–pencil test emergency form for students whose individualized education program or Section 504 plan specified testing on a paper–pencil form, or when a school experienced unexpected, temporary technology issues beyond the school’s control.

The form used in 2022–23 was the same as the 2018–19 paper–pencil Summative ELPAC form. These forms are aligned to the *Proposed Test Blueprints for the ELPAC* (CDE, 2015) that were approved by the California State Board of Education (SBE) in November 2015. The blueprint of emergency forms varies from the computer-based assessment, because the Summative ELPAC test blueprints were reviewed to determine where minor adjustments could be made to appropriately use computer-based delivery and increase the amount of information collected at the upper range of English language proficiency (ELP), while continuing to ensure the assessment remains fair and valid for its intended purposes. The SBE approved the revisions to the computer-based Summative ELPAC test blueprints in May 2019.

The blueprint differences between the emergency forms and the computer-based forms are outlined as follows:

* *Listen to a Classroom Conversation* was added at grade one and grade two because the introduction of Listening audio files at those grade levels made it possible for students to listen to conversations between two speakers.
* *Write About an Experience* was added at grade one and grade two to collect more information at the upper range of ELP because it was similar to *Short Compositions*, which had been administered at those grade levels in the ELPAC’s predecessor ELP assessment, the California English Language Development Test.
* A second *Speaking—Retell a Narrative* item was added at kindergarten and a second *Speaking—Summarize an Academic Presentation* item was added at grades one through twelve to collect more information at the upper range of ELP.

Standard, large-print, and braille paper–pencil forms were available.

### Psychometric Criteria and Identification of Eligible Items

The ETS PAR team reviewed the operational test form (Form 1) for each grade level and grade span to ensure that each form met the psychometric criteria and was aligned with the Summative ELPAC blueprint. PAR also reviewed forms 2, 3, 4, 5, and 6, which included field test items, to ensure that these conformed to the *Form Assembly Specifications for the 2022–23 Summative ELPAC* (ETS, 2022).

The following criteria were used to review the operational forms:

* Do the forms align with the Summative ELPAC blueprints?
* Do item statistics meet the psychometric criteria? Criteria include the following:
* The range for p-values is between 0.20 and 0.95.
* Item-total correlations are greater than 0.15.
* Items flagged for C-DIF—differential item functioning—are used only as necessary to meet the test blueprint and with CDE approval.
* Item response theory (IRT) a-parameter estimates are positive values and have standard errors of 0.3 or less.
* IRT b-parameter estimates are within the range of −4.0 to +4.0, prior to the application of the vertical scale.

The following questions were asked when reviewing the field test forms:

* For each grade level or grade span, do the forms contain all of the items from the operational forms?
* Do the forms have the number of field test items designated in the assessment development specifications?

Psychometricians reviewed one operational form and all field test forms, if applicable, for each grade level and grade span. The number of items reviewed are shown in table 4.1 and table 4.3.

The number of items and total score points for each task type were aggregated within each domain. These summary counts were then compared with the associated values in the blueprint. The psychometricians determined that each of the six forms contained enough items and score points, across task types, to meet the form requirements specified by the Summative ELPAC blueprint.

The psychometric review of operational item statistics included several steps. First, PAR staff reviewed forms for consistency with form specifications in terms of content and item type composition. Item performance was then evaluated by reviewing individual item parameter estimates and the summary IRT statistics for each operational form.

### California Department of Education Forms Review

The CDE used a gatekeeper process to review all test materials. Test materials for review and approval by the CDE included form planners, *Directions for Administration (DFAs),* and student-facing items in the TDS. All test materials were approved before they were made available for use.

For the reviews of form planners and the *DFAs,* ETS initiated the review by submitting materials to the CDE via the gatekeeper system, along with the criteria for the review. CDE consultants performed the initial review and returned comments and requests for revisions to ETS. ETS’ staff then revised the materials as requested and returned them to the CDE consultants, who reviewed the updated materials. If the test materials needed additional revisions, they were returned to ETS for further modifications.

Once CDE consultants found that the test materials met the review criteria, the CDE consultants submitted the test materials to the CDE administrator for approval. Test materials that were approved with revisions were revised by ETS and resubmitted for approval. Test materials that were not approved needed significant revisions and had to be submitted to the consultants again before they could be resubmitted to the CDE administrator for approval.

Because the Summative ELPAC is preequated, no content revisions can be made to the operational items. Once the operational items in a form planner were approved by the CDE, no further item replacements could be made.

### Configuration of the Test Delivery System

Once all the test reviews were completed and concerns, if any, had been resolved, the official ordered item sequence of the proposed forms was sent to Cambium Assessment, Inc. (CAI) for configuration of the TDS. Unlike other stages of the test production process, this stage must occur prior to every administration of the Summative ELPAC, even in the case of a form reuse.

Each item underwent an extensive platform review on different operating systems, such as Windows, Linux, and iOS, to ensure that the item’s appearance was consistent across all platforms.

The platform review was conducted by a team at CAI consisting of a team leader and several team members. The team leader presented the item as it was approved in ETS and CAI item banks. Each team member was assigned a different platform—hardware device and operating system—and reviewed the item to see that it rendered as expected. This platform review meeting ensured that all items were presented consistently to all students regardless of testing device or operating system for standardization of the test administration.

Prior to operational deployment, the testing system and content were deployed to a staging server where they were subject to UAT by both ETS and CAI staff. The TDS UAT served as both a software evaluation and a content approval.

Following the UAT by ETS and CAI staff, separate UAT cycles were conducted by the CDE. The UAT review provided the CDE with an opportunity to interact with the exact assessment that would be administered to the students. The CDE had to approve the Summative ELPAC UAT before the assessment could be released for administration to students.

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## Test Administration

This chapter details the processes involved in the administration of the 2022–23 Summative English Language Proficiency Assessments for California (ELPAC). It also describes the procedures followed by ETS to maintain test security throughout the test administration process.

### Overview

The Summative ELPAC was administered to students in kindergarten through grade twelve (K–12) in 2022–23 in conjunction with the other assessments that compose the ELPAC System.

In accordance with the procedures for the computer-based ELPAC, local educational agencies (LEAs) identified test examiners and entered the test examiners as users into the Test Operations Management System (TOMS). ETS provided LEA staff with the appropriate training materials, such as test administration manuals, videos, and webinars, to ensure that the LEA staff and test examiners understood how to administer the computer-based Summative ELPAC domain assessments.

The testing window for the 2022–23 administration of the Summative ELPAC was planned for February 1 through May 31. Specific test administration schedules within that window were determined locally pursuant to *California Code of Regulations,* Title 5 (5*CCR*), Section 11518(d).

#### Platform

For the 2022–23 Summative ELPAC administration, students were provided with a computer or other electronic device on which to take the assessment. Each student used the secure browser or web-based browser (remote only) to take the assessment. The Summative ELPAC used the same secure browser, web-based browser, and computer-based testing platform as the California Assessment of Student Performance and Progress (CAASPP). Test examiners used a separate computer or other electronic device from which to access the Test Administrator Interface and manage the testing session.

Paper–pencil tests (PPTs), also called “emergency forms,” were available for an LEA if a site had an emergency that prevented test examiners from accessing the computer-based assessments, as well as for students whose individualized education program (IEP) or Section 504 plan required PPT materials, including braille and large print. The LEA was required to submit a request for these materials and get California Department of Education (CDE) approval prior to testing. Materials were shipped only after the CDE’s approval had been secured.

#### Materials

Test examiners were required to use the *Directions for Administration (DFAs),* housed securely in TOMS, to administer assessments to students. For kindergarten through grade two (K–‍2), there was a combined *DFA* for the Listening, Speaking, Reading, and Writing domains. For grades three through twelve, there was a combined *DFA* for the Listening, Reading, and Writing domains and a separate *DFA* for the Speaking domain. In addition, the nonsecure *Preparing for Administration (PFA)* documents—one for K–2 and one for grades three through twelve—contained planning and preparation content that helped test educators to become familiar with testing guidelines.

For students who needed to be tested remotely, the *DFAs* included instructions for remote testing. Additional information was found in the *Summative ELPAC Online Test Administration Manual* (CDE, 2023b). PDF versions of the K–2 Writing Teacher Answer Book and Student Writing Response Sheets were provided in TOMS for a test examiner to download and share with the student via an online meeting application while administering the Writing domain.

A Student Score Sheet was provided as the last page of the following documents:

* K–2 *DFA*
* Grades three through twelve Speaking domain *DFA*

Use of the scoring sheet was optional; the test examiner could use it to record a student’s Speaking scores manually. These student scores could then later be entered into the Data Entry Interface (DEI). Alternatively, the test examiner could enter the student’s Speaking scores into the DEI while administering the assessment.

LEAs that administered the PPT K–2 Writing domain were provided with pre-‍identification labels and Group Identification Sheets and were asked to return PPT materials at least twice a month.

#### Means

In accordance with the procedures for all California assessments, LEAs designated trained test examiners for the Summative ELPAC in the secure TOMS. ETS provided LEA staff with the appropriate training materials, such as test administration manuals, videos, and webcasts, to ensure that the LEA staff and test examiners understood how to administer the Summative ELPAC for both in-person and remote testing.

The Summative ELPAC was designed for one-on-one administration between a single student and a test examiner for K–2 in the Listening, Reading, and Speaking domains, as well as the Writing domain for kindergarten and grade one; and group administration for grades three through twelve in the Listening, Reading, and Writing domains. The exceptions for group administration were the Speaking domain, which was administered one-on-one for all grade levels and grade spans; and the Writing domain, which had an optional group administration for students in grade two when administered in person.

For remote administration of the Summative ELPAC, all domains for K–2 were designed for one-on-one administration, with the test examiner logged on to the web-based Student Testing Interface and sharing the screen with the student via an online meeting application. For testing students in grades three through twelve remotely, the Speaking domain would be administered in the same manner as the K–2 administration, but the Listening, Reading, and Writing domains could be administered in a group of up to 20 students in a single test session. The test examiner would provide instructions to the students via an online meeting application and start the test session, then instruct the students to log off all applications on their testing device and log on to the secure browser for testing (CDE, 2023b).

#### Score Reporting

Individual student scores, school-level scores, and Student Score Reports (SSRs) for the Summative ELPAC were available to test sites and LEAs through TOMS. The SSRs were available in English and in the student’s primary language if that language was Spanish, Vietnamese, Filipino, Traditional Chinese, or Korean.

### Administration and Scoring Training

The training team for the ELPAC Administration and Scoring Training (AST) created a complete virtual training model for the 2022–23 administration of the Summative ELPAC.

Every LEA in California was required to complete the online LEA Certification course on the Moodle Training Site (Moodle): Summative ELPAC AST. (Moodle is a free, learning-management, open-source software.) The LEA ELPAC coordinator, or a designee, was responsible for overseeing test examiners’ calibration progress.

An online Moodle training site was available as a restricted site that could be accessed only by LEA ELPAC coordinators, LEA lead trainers, ELPAC test examiners, and others requiring general training in the administration of the ELPAC. The site contained all resources needed to conduct a training, such as training presentations, along with the presenters’ scripts.

The following is a list of high-level assumptions, changes, and enhancements for training for the 2022–23 Summative ELPAC:

* All LEA ELPAC coordinators were expected to report and certify that the training requirement had been met.
* All test examiners administering the Speaking domain were expected to calibrate for scoring Speaking each year.

The Summative ELPAC training binder and online training and calibration were updated to reflect the Speaking items that were replaced as part of the 30 percent refresh of the Summative ELPAC forms.

* New Talk About a Scene scoring videos specific to each operational item were part of the certification courses.
* The digital training binder was updated to meet accessibility standards for posting online and was not printed and shipped to LEAs.
* A 2022–23 overview video was filmed.
* A new Summative ELPAC 101 for LEA Coordinators video and a Summative ELPAC 101 for Test Examiners video was produced.
* The new PFA documents were produced.
* The online training and calibration quizzes were updated, to the extent possible, to use actual footage of students instead of audio files for all new samples.

#### Goals

The goals of the 2022–23 Summative ELPAC AST were to

1. standardize the administration of the Summative ELPAC for all domains (i.e., Listening, Speaking, Reading, and Writing);
2. train LEA trainers to score the Speaking items accurately and reliably, so they can effectively train test examiners to locally administer and score the ELPAC; and
3. train LEA trainers to train other qualified persons to administer and score the Summative ELPAC.

#### Local Educational Agency Training Requirement

All LEA ELPAC coordinators were expected to complete, or designate staff to complete, the LEA certification requirement.

##### Certification of Training

Two certification courses were created, and the Sacramento County Office of Education (SCOE) tracked LEA completion status:

1. **LEA Certification (K–12):** The LEA ELPAC coordinator or a designee training in an LEA with K–12 completes 12 videos to receive an LEA certificate.
2. **LEA Certification (grades six through twelve):** The LEA ELPAC coordinator or a designee training in an LEA with grades six through twelve completes 10 videos to receive an LEA certificate.

Table 5.1 shows the number of certificates issued to individuals who would have attended the statewide in-person training for each certification course. The certificates-issued count is a duplicated count by LEA, as multiple people from an LEA may have completed certification.

Table 5.1 LEA Certification Counts

|  |  |
| --- | --- |
| **LEA Certification Course** | **Number of LEA Certificates Issued** |
| K–12 Certification | 1,505 |
| Grades 6–12 Certification | 519 |

Some LEAs had a Memorandum of Understanding (MOU) with another LEA to provide training, provide a trained test examiner to conduct the testing, or both; and were, therefore, not required to complete training. The total number of LEAs that completed training or had an MOU was 1,937. As of the LEA certification recommended deadline of December 5, 2022, there were 924 LEAs that had not completed certification. The CDE was provided with a list of LEAs that were not certified as of the deadline. As of the end of April 2023, there were 284 LEAs remaining that had not completed certification. At the close of the summative administration window on May 31, 2023, there were 85 LEAs that had not completed certification. Some of these LEAs may not have had eligible students.

##### Monitoring Test Examiner Calibration

Each LEA has a unique user group in Moodle, with each LEA being issued a unique enrollment key for each of the training courses. Each LEA ELPAC coordinator can designate ELPAC trainers within the site and request that trainers have access to view reports and monitor the completion status of test examiners.

The LEA ELPAC coordinator, or a designee, was responsible for overseeing test examiners’ calibration progress and completion. Test examiners were emailed a certificate of completion upon successfully completing and passing calibration, and test examiners were expected to email their certificate to their LEA ELPAC coordinator. LEA ELPAC coordinators could also monitor test examiners’ progress in the Activity Completion Report and Grade Book in Moodle.

The Test Examiner Training and Calibration course was redesigned by grade level or grade span for any person administering the 2022–23 Summative ELPAC. The Test Examiner Training and Calibration course was divided into sections specific to grade level or grade span and was organized with training resources and calibration certificates by grade level and grade span. Test examiners needed only to calibrate for Speaking items in the grade level or grade span being administered.

Table 5.2 shows the number of test examiners statewide who completed calibration certificates by grade level or grade span and the total number of LEAs represented by these test examiners. The total number of certifications is a duplicate count, as some test examiners could take two or more grade-level certifications. In total, 33,340 test examiners representing 1,637 LEAs were issued Speaking calibration certificates.

Table 5.2 Test Examiner Certification Counts

|  |  |
| --- | --- |
| **Test Examiner Training and Calibration Course** | **Number of Certificates Issued** |
| Kindergarten | 4,836 |
| Grade 1 | 3,492 |
| Grade 2 | 3,314 |
| K–2 | 3,106 |
| Grades 3–5 | 8,756 |
| Kindergarten–Grade 5 | 7,764 |
| Grades 6–8 | 8,385 |
| Grades 9–12 | 5,024 |
| Grades 6–12 | 2,357 |
| **Total Certifications Issued:** | **47,148** |
| **Total Individual Test Examiners Certified:** | **33,340** |

A total of 2,166 test examiners responded to an optional feedback survey within the Test Examiner Training and Calibration course. Sixty-one percent reported to be experienced test examiners and 39 percent new test examiners. Eighty-two percent of test examiners reported using Moodle as an independent self-paced training, and 18 percent reported using Moodle as a hybrid model with support from an LEA trainer.

When asked if the training quizzes prepared respondents to pass the calibration quizzes, 88 percent of respondents agreed that the training quizzes did. This suggests that test examiners were using the breadth of the training resources along with the calibration quizzes and finding the resources useful and effective.

#### Materials on the Moodle Training Site

The ELPAC Moodle site provided California LEAs with the necessary training resources to train the test examiners who would administer and score the ELPAC. The site contained all resources needed to conduct an LEA test examiner training session, such as a downloadable AST binder, training presentations, training videos, scoring rubrics, and training and calibration quizzes for Speaking scoring.

LEA trainers downloaded materials to prepare for their training sessions and shared access to the site with the test examiners within the LEA. Test examiners used the site to review training materials and to calibrate in preparation for scoring the Speaking domain.

Training materials are described in the next subsections.

##### Training Binders

A digital Summative ELPAC AST binder was posted in Moodle for LEA trainers. Training binder improvements included

* improving accessibility and tagging for the online document,
* reorganizing the binder to move all calibration sets from the end of the binder to within each task type sections into subsections for each grade level or grade span,
* updating the front matter of each task type section training suggestions, and
* updating Section 1 to align to new videos.

The training materials reflected the operational items in the 2022–23 Summative ELPAC test materials. Speaking samples in the training binder and training presentations reflected the operational Speaking assessment for all grade levels and grade spans.

Materials included the following:

* **Section 1—Introduction and Test Administration**
* Overview of the program
* Contact information
* Test administration for a group and individual students
* Rubrics for the Speaking domain
* Moodle resources
* **Section 2—Talk About a Scene**
* Prompting and scoring guidelines
* Rubrics
* All scenes for each grade level and grade span
* Test items and anchor charts
* **Section 3—Speech Functions**
* Scoring guidelines
* Rubric
* Anchors, with more than 116 audio tracks as samples for training and calibration
* **Section 4—Support an Opinion**
* Prompting and scoring guidelines
* Rubrics
* Anchors, with more than 176 audio tracks as samples for training and calibration
* **Section 5—Retell a Narrative**
* Prompting and scoring guidelines
* Rubric
* Anchors, with more than 100 audio tracks as samples for training and calibration
* **Section 6—Present and Discuss Information**
* Prompting and scoring guidelines
* Rubrics
* Anchors, with more than 84 audio tracks as samples for training and calibration
* **Section 7—Summarize an Academic Presentation**
* Prompting and scoring guidelines
* Rubric
* Anchors, with more than 192 audio tracks as samples for training and calibration
* **Section 8—K–2 Administration**
* Video: Kindergarten Through Grade Two Listening, Reading, and Writing Administration

##### Training Videos

Two new test administration videos were produced for test examiners:

1. Summative ELPAC 101 for Test Examiners video: Includes a detailed overview of *PFAs, DFAs,* and administration
2. What’s New for 2022–23 video

Eleven summative test administration videos were made available and posted to Moodle for training, and nine remote administration videos were created for test administration and parent/guardians and students; these were made available with the other training materials. The videos showed footage of students and test administration on the computer-based platform with narration that included prompting and scoring guidelines as a rubric overview.

Key updates and changes to training videos for the 2022–23 administration are included in table 5.3.

Table 5.3 Scoring Training Videos

|  |  |
| --- | --- |
| **Video Title** | **Description** |
| **K–2 Test Administration—Reading, Listening, and Writing** | The narrated video captured a student in kindergarten or grade one being administered the ELPAC one-on-one using the user acceptance testing (UAT) environment of the training field test. The video included information about the test examiner’s knowledge of the use of tools and navigation of the tools.  The video also included footage of the new stopping marker screens in the test delivery system (TDS), test directions for grade two *DFAs,* the addition of writing samples and rubrics in K–2 *DFAs,* information on how to use the stopping markers, narration that grade two students read passages independently, and graphic images of *DFA* pages, such as domain instructions with a red box around the stopping marker. |
| **Grades Three Through Twelve Group Administration Video** | The narrated video captured students in a group administration session of the Summative ELPAC using the UAT environment of the field test.  The video also included refreshed images and teacher-read instructions from the *DFAs.* |
| **Speaking Overview** | The video captured a student’s one-on-one administration of the full Speaking assessment, including all task types, using the training test UAT environment. It included using the Speaking *DFA,* recording scores during administration, and entering scores into the DEI.  The video also included footage of the stopping marker screens in the TDS, teacher-read logon instructions, and the updated introduction to the video. |
| ***Talk About a Scene*** | The narrated video captured a student being administered a *Talk About a Scene* set of items. This video included the practice question and modeling, pointing guidelines, prompting and scoring guidelines, rubrics overview, use of the Speaking *DFA,* and additional computer platform talking points.  The video also included footage of the stopping marker screen in the TDS and screen captures of logon instructions. |
| ***Speech Functions*** | The narrated video captured a student being administered a set of *Speech Functions* items. This video included the practice question and modeling, pointing guidelines, prompting and scoring guidelines, rubric overview, use of the Speaking *DFA,* and additional computer platform talking points.  The video also included footage of the stopping marker screen in the TDS, *DFA* images with stopping marker images with a red box, and student video footage to show various score points. |
| ***Support an Opinion* (K–2, grades 3–12, and K–12)** | The narrated video included two subsections coinciding with the two rubrics. The video captured a student who could be in K–2 being administered a set of *Support an Opinion* items and a student who could be in grades three through twelve being administered a set of items. This video included pointing guidelines, prompting and scoring guidelines, a rubrics overview, use of the Speaking *DFA,* and additional computer platform talking points.  The video also included footage of the stopping marker screen in the TDS, *DFA* images with stopping marker images with a red box, student video footage of responses at various score points, and footage of the effective language features chart. |
| ***Retell a Narrative*** | The narrated video captured a student who could be in K–2 being administered a set of *Retell a Narrative* items and a student who could be in grades three through five being administered a set of items. This video included pointing guidelines, prompting and scoring guidelines, a rubric overview, use of the Speaking *DFA,* and additional computer platform talking points.  The video also included student video footage of responses at various score points. |
| ***Present and Discuss Information*** | The narrated video captured a student who could be in grades six through twelve being administered a *Present and Discuss Information* item. This video included pointing guidelines, prompting and scoring guidelines, a rubric overview, use of the Speaking *DFA,* and additional computer platform talking points.  The video also included current operational *DFA* images and student video footage of responses at various score points. |
| ***Summarize an Academic Presentation*** | The narrated video captured a student being administered a *Summarize an Academic Presentation* item. This video included pointing guidelines, prompting and scoring guidelines, a rubric overview, use of the Speaking *DFA,* and any additional computer platform talking points.  The video also included *Summarize an Academic Presentation* information, about the operational history–social science items for grades three through twelve. |
| **Summative ELPAC 101 for Test Examiners** | This video included an overview of the Summative ELPAC and a review of the *PFA* and *DFA*. |
| **Summative ELPAC What’s New** | The newly created video included updates for the 2022–‍23 test administration, such as the following new information:   * Optional trainer certification for LEA staff members who will lead ELPAC training * Summative ELPAC 101 video for LEA coordinators with new Moodle 2023 tutorial * Training binder now digital only * *Talk About a Scene* calibration quizzes added to calibration requirements * *DFA, PFA,* and How to Start an ELPAC Test Session * Speaking practice test question * Non-embedded accessibility resource videos for the ELPAC |

##### Remote Testing Administration Videos

Nine test administration videos on how to administer the Summative ELPAC remotely were available in Moodle for training, along with the Listening, Reading, and Writing Directions for Remote Testing for Parents/Guardians and Students for Grades 3–12 in English and in Spanish. The videos are described in table 5.4.

Table 5.4 Available Remote Administration Training Videos

|  |  |
| --- | --- |
| **Video Title** | **Description** |
| **K–2 Remote Test Administration for the Writing Domain** | This video provided a tutorial on administering the Writing test questions remotely for K–2 students, demonstrated students using the Student Writing Response Sheets, and showed test examiners transcribing student responses for the Writing domain. |
| **K–2 Remote Test Administration for the Listening and Reading Domains** | This video provided a tutorial on how test questions are delivered differently in a remote administration; in particular, it showed how to point to and indicate answer choices and how K–2 students could demonstrate their responses in the Listening and Reading domains. |
| **K–12 Remote Test Administration for the Speaking Domain** | This video provided a tutorial on delivering Speaking test items in a remote administration. |
| **How to Take a Remote Test (versions in English and Spanish)** | These student-oriented videos demonstrated test examiners placing students in grades three through twelve in a pretest video conferencing session prior to the students’ signing in to a remote group administration test session. It presented signing in to the secure browser, communicating with the test examiner during a remote testing session, and ending the assessment. |
| **How to Give a Remote Group Test** | This demonstration video provided suggestions for, and examples of, how test examiners could deliver sign-in instructions for students prior to beginning a remote test administration. It included a demonstration of a pretest video conference meeting, an educator supporting students as the students signed in using the secure browser, and the educator communicating with students during testing. |
| **Starting a One-on-One Remote Test Session** | This video provided a tutorial for test examiners to demonstrate logging on to the web-based Student Testing Interface to remotely administer one of the following ELPAC domains:   * K–2 ELPAC Listening * K–2 ELPAC Reading * K–12 ELPAC Speaking |
| **Scheduling, Starting, and Stopping a Remote Test Session** | This video provided a tutorial for test examiners on scheduling, starting, and stopping a remote test session. |
| **Monitoring a Remote Test Session** | This video provided a tutorial for test examiners on how to monitor a remote test session. |

##### Anchor–Training–Calibration Samples

Five training presentations, called Anchor–Training–Calibration Samples, were created for LEA ELPAC trainers to use for local training. These training presentations included all of the Speaking video and audio files to be embedded into the presentations. The sample presentations were posted in the Trainer Resources course in Moodle and designed for LEA trainers to use if hosting an in-person or virtual training. Most of these presentations focused on training and scoring the Speaking task types.

Table 5.5 includes a list of the sample presentations available to LEAs.

Table 5.5 Anchor–Training–Calibration Samples

|  |  |
| --- | --- |
| **Binder Section** | **Description** |
| Section 3 | *Speech Functions* |
| Section 4 | *Support an Opinion* |
| Section 5 | *Retell a Narrative* |
| Section 6 | *Present and Discuss Information* |
| Section 7 | *Summarize an Academic Presentation* |

##### Calibration Quizzes

To give test examiners an opportunity to refresh and test their knowledge prior to administering the Summative ELPAC, the online training site included more than 80 training and calibration quizzes with more than 750 audio samples.

The training quizzes allowed a test examiner to listen to the audio, select a score, and receive feedback. The Moodle quiz provided the correct score, justification, and feedback after the test examiner completed 10 video samples.

For items that included artwork, such as *Retell a Narrative* and *Present and Discuss Information*, the picture stimulus was included in the quiz for the test examiner’s reference while listening to the audio. A replay feature allowed the test examiner to replay the audio as necessary.

Upon completion of the calibration quiz, the “Pass/Fail” and “Percent correct” notifications were posted for the test examiner.

The training and calibration quizzes in Moodle provided the following minimum calibration rates:

* 80 percent calibration required for Support an Opinion (grades three through twelve), Retell a Narrative, Present and Discuss Information, and Summarize an Academic Presentation for rubrics on a 0–3 or 0–4 scale
* 90 percent calibration required for Speech Functions and Support an Opinion (K–2) for rubrics on a 0–2 scale

The following features were new for 2022–23:

* Development of calibration quizzes for Talk About a Scene for every grade level or grade span
* Training to enhance Effective Features of Language for Support an Opinion grades three through twelve
* The shift from using student audio files to using student video files (More than 300 new student video files were used in the training and calibration quizzes.)

Table 5.6 presents a list of the training and calibration quizzes by task type created and posted to Moodle.

Table 5.6 Training and Calibration Quizzes by Grade Level or Grade Span

|  |  |  |
| --- | --- | --- |
| **Grade Level or Grade Span Section in Moodle** | **Training Quizzes** | **Speaking Calibration Certificate Quizzes** |
| Kindergarten (K) | * *Support an Opinion*—K * *Retell a Narrative*—K * *Summarize an Academic Presentation*—K | * *Talk About a Scene*—K * *Support an Opinion*—K * *Retell a Narrative*—K * *Summarize an Academic Presentation*—K |
| Grade 1 | * *Support an Opinion*—Grade 1 * *Retell a Narrative*—Grade 1 * *Summarize an Academic Presentation*—Grade 1 | * *Talk About a Scene*—Grade 1 * *Support an Opinion*—Grade 1 * *Retell a Narrative*—Grade 1 * *Summarize an Academic Presentation*—Grade 1 |
| Grade 2 | * *Speech Functions*—Grade 2 * *Support an Opinion*—Grade 2 * *Retell a Narrative*—Grade 2 * *Summarize an Academic Presentation*—Grade 2 | * *Talk About a Scene*—Grade 2 * *Speech Functions*—Grade 2 * *Support an Opinion*—Grade 2 * *Retell a Narrative*—Grade 2 * *Summarize an Academic Presentation*—Grade 2 |
| K–2 Combined | * *Speech Functions*—Grade 2 * *Support an Opinion*—K–2 Combined * *Retell a Narrative*—K–2 Combined * *Summarize an Academic Presentation*—K–2 Combined | * *Talk About a Scene*—K * *Talk About a Scene*—Grade 1 * *Talk About a Scene*—Grade 2 * *Speech Functions*—Grade 2 * *Support an Opinion*—K–2 Combined * *Retell a Narrative*—K–2 Combined * *Summarize an Academic Presentation*—K–2 Combined |
| Grades 3–5 | * *Speech Functions*—Grades 3–5 * *Support an Opinion*—Grades 3–‍5 * *Retell a Narrative*—Grades 3–5 * *Summarize an Academic Presentation*—Grades 3–5 | * *Talk About a Scene*—Grades 3–‍5 * *Speech Functions*—Grades 3–5 * *Support an Opinion*—Grades 3–‍5 * *Retell a Narrative*—Grades 3–5 * *Summarize an Academic Presentation*—Grades 3–5 |
| K–Grade 5 Combined | * *Speech Functions*—Grades 2–5 Combined * *Support an Opinion*—K–2 Combined * *Support an Opinion*—Grades 3–‍5 * *Retell a Narrative*—K–5 Combined * *Retell a Narrative*—Grades 3–5 * *Summarize an Academic Presentation*—K–5 Combined | * *Talk About a Scene*—K * *Talk About a Scene*—Grade 1 * *Talk About a Scene*—Grade 2 * *Talk About a Scene*—Grades 3–‍5 * *Speech Functions*—Grades 2–5 Combined * *Support an Opinion*—K–2 Combined * *Support an Opinion*—Grades 3–‍5 * *Retell a Narrative*—K–5 Combined * *Summarize an Academic Presentation*—K–5 Combined |
| Grades 6–8 | * *Speech Functions*—Grades 6–8 * *Support an Opinion*—Grades 6–‍8 * *Present and Discuss Information*—Grades 6–8 * *Summarize an Academic Presentation*—Grades 6–8 | * *Talk About a Scene*—Grades 6–‍8 * *Speech Functions*—Grades 6–8 * *Support an Opinion*—Grades 6–‍8 * *Present and Discuss Information*—Grades 6–8 * *Summarize an Academic Presentation*—Grades 6–8 |
| Grades 9–12 | * *Speech Functions*—Grades 9–‍12 * *Support an Opinion*—Grades 9–‍12 * *Present and Discuss Information*—Grades 9–12 * *Summarize an Academic Presentation*—Grades 9–12 | * *Talk About a Scene*—Grades 9–‍10 * *Talk About a Scene*—Grades 11–12 * *Speech Functions*—Grades 9–‍12 * *Support an Opinion*—Grades 9–‍12 * *Present and Discuss Information*—Grades 9–12 * *Summarize an Academic Presentation*—Grades 9–12 |
| Grades 6–12 Combined | * *Speech Functions*—Grades 6–‍12 Combined * *Support an Opinion*—Grades 6–‍12 Combined * *Present and Discuss Information—*Grades 6–12 Combined * *Summarize an Academic Presentation*—Grades 6–12 Combined | * *Talk About a Scene*—Grades 6–‍8 * *Talk About a Scene*—Grades 9–‍10 * *Talk About a Scene*—Grades 11–12 * *Speech Functions*—Grades 6–‍12 Combined * *Support an Opinion*—Grades 6–‍12 Combined * *Present and Discuss Information*—Grades 6–12 Combined * *Summarize an Academic Presentation*—Grades 6–12 Combined |

### User Roles and Standardization

The test administration procedures were designed so that the assessments are administered in a standardized manner. ETS took all necessary measures to ensure the standardization of test administration, as described in this section.

#### Local Educational Agency ELPAC Coordinator

An LEA ELPAC coordinator was designated by the district superintendent or charter school administrator at the beginning of the 2022–23 school year. LEAs include public school districts, California State Board of Education–authorized charter schools, county office of education programs, and direct funded charter schools.

LEA ELPAC coordinators were responsible for ensuring the proper and consistent administration of the ELPAC. In addition to the responsibilities set forth in 5*CCR* Section 11518.40, their responsibilities included

* adding site ELPAC coordinators and test examiners into TOMS;
* training site ELPAC coordinators and test examiners regarding the state requirements and ELPAC administration as well as security policies and procedures;
* providing checklists for site ELPAC coordinators and test examiners to review in preparation for administering the summative assessments;
* overseeing test administration activities;
* reporting test security incidents (including testing irregularities) to the CDE using the online Security and Test Administration Incident Reporting System (STAIRS)/Appeals process;
* requesting an Appeal (if indicated by TOMS prompts while reporting an incident using the STAIRS/Appeals process);
* ensuring that correct testing procedures were followed;
* ensuring that test materials were distributed to the schools and kept in a locked, secure area at all times;
* ensuring that all site ELPAC coordinators and test examiners were trained and certified to administer the Summative ELPAC;
* ordering test materials and supplemental test materials in TOMS; and
* ensuring adequate test materials were available and redistributed throughout the LEA during the testing window as needed.

#### Site ELPAC Coordinator

A site ELPAC coordinator is trained by the LEA ELPAC coordinator for each test site (5*CCR* Section 11518.40[b][7]). A site ELPAC coordinator must be an employee of the LEA and must sign a security agreement (5 *CCR* Section 11518.45[b][3]).

A test site coordinator was responsible for identifying test examiners and ensuring that they have signed *ELPAC* *Test Security Affidavits* (5 *CCR* Section 11518.45[b][3]). A site ELPAC coordinator’s duties may have included

* adding test examiners into TOMS;
* entering test settings for students;
* creating testing schedules and procedures for a school consistent with state and LEA policies;
* working with technology staff to ensure secure browsers are installed and any technical issues are resolved;
* monitoring testing progress during the testing window and ensuring all students take the Summative ELPAC, as appropriate;
* coordinating and verifying the correction of student data errors in the California Longitudinal Pupil Achievement Data System;
* ensuring a student’s test session is rescheduled, if necessary;
* addressing testing problems;
* reporting test security incidents (including testing irregularities) to the CDE using the online STAIRS/Appeals process;
* overseeing administration activities at a school site; and
* requesting an Appeal (if indicated by TOMS prompts while reporting an incident using the STAIRS/Appeals process).

#### Test Examiner

Test examiners were identified by site ELPAC coordinators as individuals who would administer the Summative ELPAC.

A test examiner must have signed a security affidavit (5 *CCR* Section 11518.50[d]).

A test examiner’s duties may have included

* ensuring the physical conditions of the testing room meet the criteria for a secure test environment;
* administering the ELPAC, including the Summative ELPAC;
* reporting all test security incidents to the site ELPAC coordinator and LEA ELPAC coordinator in a manner consistent with state and LEA policies;
* viewing student information prior to testing to ensure that the correct student receives the proper assessment with appropriate resources and reporting potential data errors to site ELPAC coordinators and LEA ELPAC coordinators;
* monitoring student progress throughout the test session using the Test Administrator Interface; and
* fully complying with all directions provided in the *DFAs* for the Summative ELPAC (CDE, 2023e).

#### Instructions for Test Administration

##### *Preparing for Administration*

The nonsecure *Preparing for Administration (PFA)* documents (CDE, 2023f, 2023g) contained the planning and preparation content from the *DFAs* and were posted on the Manuals and Instructions web page on the ELPAC website. The *PFA* was used by test examiners to prepare for the test administration and to become familiar with testing guidelines. There was one *PFA* for K–2 and one *PFA* for grades three through twelve.

The *PFA* included the following:

* Administration notes
* Linked resources
* Necessary testing materials
* Requirements and recommendations for use before, during, and after testing

##### *Directions for Administration*

Test examiners were required to use the *DFAs,* housed securely in TOMS, to administer assessments to all eligible students. For K–2, each grade level had a specific combined *DFA* that included instructions for all domains. For grades three through twelve, each grade span had a specific combined *DFA* for the Listening, Reading, and Writing domains and a separate *DFA* for the Speaking domain.

For students who needed to be tested remotely, test examiners could access remote testing information in the *DFAs*. There were no longer separate *DFAs* specifically for remote testing, lessening the number of *DFAs* test examiners needed. Aside from the *DFAs,* the PDF versions of the K–2 Writing Answer Books were in TOMS for test examiners to download and share with the student via an online meeting application while administering the Writing domain remotely.

A Speaking Student Score Sheet was provided as the last page of the K–12 *DFAs*. Use of the scoring sheet was optional; the test examiner could use it to record a student’s Speaking scores manually. These student scores could later be entered into the DEI. Alternatively, the test examiner could enter the student’s Speaking scores into the DEI while administering the assessment.

Information regarding the systems involved in testing, including sections describing the TDS so they could become familiar with the testing application used by their students, was provided in the *Summative ELPAC Online Test Administration Manual* (CDE, 2023e).

##### *Summative ELPAC Online Test Administration Manual*

The *Summative ELPAC Online Test Administration Manual* (CDE, 2023e) contained information and instructions on overall procedures and guidelines for all LEA and test site staff involved in the administration of computer-based assessments. Sections included the following topics:

* Roles and responsibilities of those involved with ELPAC testing
* Test administration resources
* Test security
* Administration preparation and planning
* General test administration
* In-person test administration
* Remote test administration
* Instructions for steps to take before, during, and after testing
* Dates for ordering materials and testing
* Guidelines for handling materials

Appendices included definitions of common terms and descriptions of different aspects of the assessment and systems associated with the assessment.

##### *CAASPP and ELPAC Test Operations Management System User Guide*

TOMS is a web-based application that allows LEA ELPAC coordinators to set up test administrations, add and manage users, submit computer-based student test settings, and order PPTs.

TOMS modules described in the *TOMS User Guide* included the following (CDE, 2023d):

* **Adding and Managing Users—**This module allowed LEA ELPAC coordinators to add site ELPAC coordinators and test examiners to TOMS so that the designated user could administer, monitor, and manage the ELPAC computer-based assessments.
* **Reports—**This module allowed LEA ELPAC coordinators and site ELPAC coordinators access to the various reports in TOMS.
* **STAIRS/Appeals—**This module allowed LEA ELPAC coordinators and site ELPAC coordinators access to create new STAIRS cases or search for STAIRS/Appeals cases.
* **Student Profile—**This module allowed LEA ELPAC coordinators, site ELPAC coordinators, and test examiners to view and manage student’s test assignments and test settings.

##### *Other System Manuals*

Other manuals were created to assist LEA ELPAC coordinators and others with the technological components of the ELPAC System and are listed next.

* ***CAASPP and ELPAC Technical Specifications and Configuration Guide for Online Testing*—**This manual provided information, tools, and recommended configuration details to help technology staff prepare computers and install the secure browser to be used for the computer-based ELPAC (CDE, 2023c).
* ***CAASPP and ELPAC Security Incidents and Appeals Procedure Guide*—**This manual provided information on how to report a testing incident and submit an Appeal to reset, reopen, invalidate, or restore individual computer-based student assessments (CDE, 2023b).
* ***CAASPP and ELPAC Accessibility Guide*—**This manual provided descriptions of the accessibility features for computer-based assessments as well as information about supported hardware and software requirements for administering assessments to students using accessibility resources, including those with a braille accommodation using Job Access With Speech® (software) or a braille embosser (hardware) (CDE, 2023a).

### Local Educational Agency Training

Each year, ETS, in collaboration with the CDE and its Assessment Validity and Outreach contractor, SCOE, establishes and implements a comprehensive training plan for LEA assessment staff and educators on all aspects of the assessment program. The ETS and SCOE annual training plans specify the audience, topics, frequency, and mode (synchronous or asynchronous) of the training, including such elements as format, participants, and organization.

Knowing that educators were confronted with challenges daily that put additional demands on their time, ETS and SCOE made every effort to make the information available in a variety of ways that allowed educators access to training at a time that was responsive to their varying circumstances. This included offering training events on multiple days and times, livestreaming events, recording and archiving training, and converting training to self-paced modules that could be taken any time, at the learner’s convenience.

All training opportunities were posted in one centralized location on the ELPAC website. LEA staff were able to register for training opportunities in one place, on the Upcoming Training Opportunities web page. Archived training was made available on the Past Training Opportunities web page, making it easier for educators to find a training they missed, and providing easier access to recorded training. ETS also employed a new strategy for providing access to training materials. Participants could register to receive a copy of the training materials without registering to attend a live training. Training materials were developed in such a way that educators could consume the information independently by reading through materials.

#### Synchronous and Asynchronous Training

All synchronous training was offered on Zoom, recorded, and made available for on-demand viewing. Zoom provides an opportunity for educators to ask questions and get answers in real time. Coffee Sessions were livestreamed on YouTube.

In response to an environment where educators had competing priorities to juggle, ETS and SCOE used various strategies to increase engagement during synchronous trainings. Live polls were presented to get real-time feedback about attendees’ knowledge of a particular topic, allowing presenters to tailor presentations to the audience’s level of understanding. The chat functionality was enabled to give participants an opportunity to interact with each other or to provide open-ended feedback, or it was disabled to minimize distraction and drive attendees’ focus to the information being presented. Breakout groups were used in smaller group trainings, as appropriate. Breaks and processing time were incorporated into presentations to give attendees opportunities to attend to other responsibilities that might result as part of their work environment.

Working closely with the CDE, ETS and SCOE continued to provide informal support to educators by offering monthly Coffee Sessions. Coffee Sessions included CDE and ETS’ staff who could answer questions about all aspects of testing. ETS also offered several Office Hours for coordinators where support staff were generally available from 9 a.m. to 3 p.m., allowing coordinators to join as needed and get customized support. SCOE continued to offer Assessment and Accountability Information Meetings intended to provide LEA coordinators with regular updates about California’s assessment and accountability systems. All trainings and meetings were recorded and archived for on-demand viewing on the Past Training Opportunities web page on the ELPAC website.

#### Videos and Guides

ETS produced videos on various aspects of administering the ELPAC, including how to perform functions within TOMS, such as setting up a test administration window, adding users, assigning assessments to students, and uploading test settings. SCOE produced the accompanying quick reference guides, providing multiple avenues of support for educators administering the assessments.

In addition to the standard administration videos, ETS produced additional videos to support administration. Some videos were geared toward parents/guardians to help them understand the assessment’s purpose. Other videos were intended to help coordinators or other users complete a process, such as administering a practice or training test, starting and stopping a test session, how to monitor student completion, and how to complete second scoring that is required for some of the assessments. This list is a sampling of the available videos intended to capture the major areas of support for various interest holders. The comprehensive suite of training videos can be found on the ELPAC Videos and Quick Reference Guides web page.

#### Training for Proper Identification and Assignment of Designated Supports and Accommodations

ETS developed a video with LEA staff to help California educators learn more about the importance of implementing ELPAC accessibility resources and best practices used by educators in the field. The “Importance of Implementing CAASPP and ELPAC Accessibility Resources: Voices from Educators” video was available on the Videos and Quick Reference Guides web page on the ELPAC website.

ETS also produced short demonstration videos for every embedded accessibility resource, demonstrating how to use the resource for educators, students, and parents/guardians. The videos were available in both English and Spanish on the Accessibility Resources Demonstration Videos web page on the ELPAC website. Demonstration videos were also created for the most frequently used non-embedded accessibility resources. These videos were linked within the Individual Student Assessment Accessibility Profile (ISAAP) Tool, increasing access to the demonstration videos. Educators using the ISAAP Tool to determine the student’s needs could view the corresponding demonstration video without having to navigate away from the tool.

A video on how to use the ISAAP Tool was also available to support educators in the process of creating an individual student profile and matching accessibility resources to student needs to ensure a fair and valid testing experience for all students.

For the 2022–23 ELPAC administration, ETS produced a two-part asynchronous training module. Module A, Matching Accessibility Resources to Students’ Needs, focused on providing participants with an understanding of the importance of accessibility resources, the categories of accessibility resources, and the process for matching students with appropriate accessibility resources for daily instruction and on assessments. Module B, Using Accessibility Resources in Daily Instruction, focused on the importance of removing barriers to student learning and using accessibility resources in daily instruction. Educators could complete the training independently or had the option to attend one of two live sessions held by ETS to extend and deepen the learning experience.

At the California Assessment Conference, SCOE offered two sessions on accessibility. “Leveraging UDL and Accessibility Resources to Improve Teaching and Learning” explored Universal Design for Learning (UDL) principles to help remove barriers to student learning and provided data collection tools to participants. The session on “Introduction to Accessibility and the ISAAP Tool” provided participants with the most up-to-date information regarding accessibility resources and offered a live practical approach to identifying and matching accessibility resources to students using the ISAAP Tool. The conference also included some shared practices sessions focused on accessibility.

#### Feedback for Continuous Improvement Survey

The ELPAC program solicits feedback annually from various interest holder groups, including LEA ELPAC coordinators, site ELPAC coordinators, and test examiners, through the CAASPP and ELPAC Feedback for Continuous Improvement Survey. Feedback was collected via a post-test survey sent to more than 275,000 California educators and through focus groups. Educators provided valuable feedback for potential improvements to the future administration of CAASPP and the ELPAC—one or both—by reporting some lessons they learned in 2022–23.

Improvements made in response to survey results are detailed in [chapter 10](#_Continuous_Improvement). The CDE and ETS used key recommendations from educators to implement positive changes in the next test administration year.

##### Overview

LEA and site ELPAC coordinators, as well as test examiners, were invited to participate in the survey. The California educators who responded provided specific, actionable insights about their test administration experience. This survey gathered information and data from educators who were part of the administration of CAASPP, the ELPAC, or both programs. Its goal was to highlight successes and identify areas for improvement, both immediate and long term.

Overall, California educators continue to express positive experiences in their preparations for administering CAASPP and the ELPAC.

##### Communication

During the 2022–23 test administration year, the CDE and ETS continued to streamline communications and provide LEAs with relevant information throughout the year. CAASPP and ELPAC monthly communications were sent throughout the administration with timely reminders and training announcements. In addition, proactive communications were sent to help remind LEA ELPAC coordinators of important actions needed for a successful administration, such as reminders to set up a test administration window, order materials, or enter scores into the DEI, if needed.

### Student Participation Requirement

California *Education Code* Section 313 requires LEAs to administer the Summative ELPAC annually to students identified as English learners until they are reclassified as fluent English proficient. Table 7.F.1 through table 7.F.5 in [appendix 7.F](#_Appendix_7.F:_Student) provide the number of test takers and the percentage of test takers and select demographic student groups for each assessment during the 2022–23 administration. Note that the data in the *Number Registered* column includes students who were registered within a grade level and eligible for the Summative ELPAC during the 2022–23 administration. The *Number Tested* columns include students who tested at the current grade level and exclude off-grade testers and students who were registered but did not test.

### Accessibility Resources

The Every Student Succeeds Act reaffirms the importance of ensuring that assessments are accessible to special populations, and the Individuals with Disabilities Education Act lays out monitoring requirements for students with disabilities. This section describes the accessibility resources used to support students in the Summative ELPAC, as well as the procedures to identify and assign students with accommodations and designated supports. Finally, the number of students who were assigned accessibility resources was reported on the basis of available data.

The 2022–23 Summative ELPAC offered commonly used accessibility resources available through the ELPAC computer-based testing platform, where applicable for the tested construct.

#### Domain Exemptions

When a student’s IEP or Section 504 plan specified that the student had a disability for which there were no appropriate accommodations for assessment in one or more of the tested domains, the student was assessed in the remaining domain(s) in which it was possible to assess the student.

A student was assigned an overall score only if assessed in both oral and written language skills. To be considered as having been assessed in oral language, the student must have been assessed in either Speaking or Listening. To be considered as having been assessed in written language, the student must have been assessed in either Reading or Writing. For the Summative ELPAC, a student could not receive an overall score if exempted from both domains within either the oral language or written language composite.

IEP teams may also determine that a student with the most significant cognitive disabilities be tested with the Summative Alternate ELPAC, as noted in the student’s IEP.

#### Accessibility Resource Categories

The purpose of universal tools, designated supports, and accommodations in testing is to provide *all* students with the opportunity to demonstrate what they know and what they are able to do. Universal tools, designated supports, and accommodations minimize or remove barriers that could otherwise prevent students from demonstrating their knowledge, skills, and achievement in a specific domain.

The CDE’s *California Assessment Accessibility Resources Matrix* (Accessibility Matrix) (CDE, 2022) is intended for school-level personnel and IEP and Section 504 plan teams to select and administer the appropriate universal tools, designated supports, and accommodations as deemed necessary for individual students.

##### Universal Tools

Universal tools were available to all students by default, although they could be disabled if a student found them distracting. Each universal tool fell into one of two categories: embedded and non-embedded. Embedded universal tools were provided through the TDS (through the ELPAC secure browser), although they could be turned off by a test examiner.

The universal tools in the following subsections were available in the 2022–23 Summative ELPAC administration.

###### Embedded

The following embedded universal tools were available to students testing in the secure browser and web-based browser:

* Breaks
* Digital notepad
* Expandable items
* Expandable passages
* Highlighter
* Keyboard navigation
* Line reader (grades three through twelve)
* Mark for review (grades two through twelve)
* Strikethrough (grades three through twelve)
* Writing tools (grades three through twelve)
* Zoom (in or out)

###### Non-Embedded

The following non-embedded universal tools were available to students testing in the secure browser and web-based browser:

* Breaks
* Oral clarification of test directions by the test examiner in English
* Scratch paper
* Test navigation assistant

The following non-embedded universal tools were available to students in K–2 taking the PPT Writing domain:

* Breaks
* Highlighter
* Mark for review
* Oral clarification of test directions by the test examiner in English
* Scratch paper

The following non-embedded universal tools were available to students taking the PPT:

* Breaks
* Highlighter (in the test book for grades two through twelve)
* Line reader (grades three through twelve)
* Mark for review (in the test book for grades two through twelve [highlighters] and grades three through twelve [nonhighlighters])
* Oral clarification of test directions by the test examiner in English
* Scratch paper
* Strikethrough (grades three through twelve)

##### Designated Supports

Designated supports were available to all students when determined for use by an educator or team of educators (with parent/guardian and student input, as appropriate) or specified in the student’s IEP or Section 504 plan. These are assigned through the test settings in TOMS. The designated supports each fell into one of two categories: embedded and non-embedded. Embedded designated supports were provided through the Student Testing Interface (through the ELPAC secure browser).

The designated supports in the following subsections were available in the 2022–23 Summative ELPAC administration.

###### Embedded

The following embedded designated supports were available to students testing in the secure browser and web-based browser:

* Color contrast
* Masking
* Mouse pointer (size and color)
* Pause or replay audio—Listening domain
* Pause or replay audio—Speaking domain
* Permissive mode
* Print (font) size
* Streamline
* Turn off any universal tool(s)

###### Non-Embedded

The following non-embedded designated supports were available to students testing in the secure browser and web-based browser:

* American Sign Language or Manually Coded English
* Amplification
* Designated interface assistant
* Magnification
* Masking
* Medical supports
* Noise buffers
* Pause or replay audio—Listening domain
* Pause or replay audio—Speaking domain
* Print-on-demand
* Read aloud for items—Writing domain
* Separate setting
* Simplified test directions
* Translated test directions (including American Sign Language or Manually Coded English)

The following non-embedded designated supports were available to students in K–2 taking the PPT Writing domain:

* American Sign Language or Manually Coded English
* Amplification
* Color overlay
* Magnification
* Masking
* Medical supports
* Noise buffers
* Read-aloud items
* Separate setting
* Simplified test directions
* Translated test directions (including American Sign Language or Manually Coded English)

The following non-embedded designated supports were available to students taking the PPT:

* American Sign Language or Manually Coded English
* Amplification
* Color overlay
* Magnification
* Masking
* Medical supports
* Noise buffers
* Pause or replay audio—Listening domain
* Pause or replay audio—Speaking domain
* Read aloud for items—Writing domain
* Separate setting
* Simplified test directions
* Translated test directions (including American Sign Language or Manually Coded English)

##### Accommodations

Accommodations are changes in procedures or materials that increased equitable access during ELPAC administration and are permitted to all eligible students if specified in the student’s IEP or Section 504 plan. Assessment accommodations for students who needed them generated valid assessment results; they allowed these students to show what they know and can do. Accommodations did not compromise the learning expectations, construct, grade-level standard, or intended outcome of the assessments.

The accommodations in the following subsections were available in the 2022–23 Summative ELPAC administration.

###### Embedded

The following embedded accommodations were available to students testing in the secure browser and web-based browser:

* American Sign Language
* Audio transcript (includes braille transcript)
* Braille (embossed and refreshable)
* Closed-captioning
* Speech-to-text
* Text-to-speech—Listening, Speaking, and Writing domains (Although this resource is allowable, it is also built into the items with the test examiner reading the items or using audio recordings.)

###### Non-Embedded

The following non-embedded accommodations were available to students testing in the secure browser and web-based browser:

* Alternate response options
* American Sign Language or Manually Coded English
* Braille
* Breaks
* Scribe (Writing)
* Speech-to-text

The following non-embedded accommodations were available to students in K–2 taking the PPT Writing domain:

* Alternate response options
* American Sign Language or Manually Coded English
* Braille
* Breaks
* Large print
* Scribe (Writing)

The following non-embedded accommodations were available to students taking the PPT:

* Alternate response options
* American Sign Language or Manually Coded English
* Audio transcript (includes braille transcript)
* Braille
* Breaks
* Large-print special form
* Scribe
* Word processor (Writing domain) (grades three through twelve)

##### Unlisted Resources

An unlisted resource is an instructional support a student regularly uses in daily instruction, assessment, or both, and has not been previously identified as a universal tool, designated support, or accommodation. The Accessibility Matrix included an inventory of unlisted resources that were already identified and were preapproved (CDE, 2022). During the 2022–23 ELPAC administration, an LEA ELPAC coordinator or a site ELPAC coordinator would use TOMS to submit a request for use of an unlisted resource. A preidentified, preapproved unlisted resource request was automatically approved. A request for an unlisted resource that was not preidentified was sent to the CDE for review and adjudication.

Unlisted resources are non-embedded resources that are made available if specified in the eligible student’s IEP or Section 504 plan and only upon approval by the CDE. Unlisted resources that changed the construct of an assessment and were approved were flagged as causing a change in construct. The lowest obtainable scale score (LOSS) would be assigned to the domain with the unlisted resource that changes the construct, the student’s score status would remain valid, and the student’s scale score would be reported but appear on the SSR with an asterisk and a footnote that the assessment was administered under conditions that resulted in a score that may not be an accurate representation of the student’s achievement.

Preidentified unlisted resources applicable to the Summative ELPAC were as follows:

* Bilingual dictionary
* English dictionary
* Signed exact English
* Thesaurus
* Translated word lists
* Translations (not provided by Smarter Balanced)

The LEA ELPAC coordinator or site ELPAC coordinator was required to submit a request for the use of an unlisted resource to the CDE a minimum of 10 business days before the student’s first day of testing. The LOSS was reported for the affected domain when administrations included unlisted resources that changed the construct of that assessment.

#### Identification and Selection

All eligible students enrolled in a California public school participate in the ELPAC System. The CDE Accessibility Matrix (CDE, 2022) is intended for school-level personnel and IEP and Section 504 plan teams to select and administer the appropriate universal tools, designated supports, and accommodations as deemed necessary for individual students.[[3]](#footnote-4)

The full list of the universal tools, designated supports, and accommodations used in ELPAC computer-based assessments, including the Summative ELPAC, is documented in the Accessibility Matrix. Most embedded and non-embedded universal tools, designated supports, and accommodations listed in parts 1, 2, and 3 of the Accessibility Matrix are available for the Summative ELPAC through the computer-based testing interface or, in the case of non-embedded resources, from the school or LEA. Part 5 of the Accessibility Matrix includes approved unlisted resources. School-level personnel, IEP teams, and Section 504 teams used the Accessibility Matrix when deciding how best to support the student’s test-taking experience.

Test examiners are given the opportunity to administer the ELPAC practice and training tests so that students have the opportunity to familiarize themselves with a designated support or accommodation prior to testing.

#### Assignment

Designated supports and accommodations are assigned to individual students on the basis of identified student need. Such assignments are implemented in TOMS by the LEA ELPAC coordinator or site ELPAC coordinator, either through individual assignment through the student’s profile in TOMS or in a batch upload for multiple students. When the batch upload process was used, settings were uploaded into TOMS using a spreadsheet with data that had either been entered into a template downloaded from TOMS; or created by selecting and entering information into the web-based ISAAP Tool. The ISAAP Tool could be used by LEAs in conjunction with the *2022–23* CAASPP and ELPAC Accessibility Guide (CDE, 2023a), as well as with state regulations and policies (such as the Accessibility Matrix) related to assessment accessibility*.*

The embedded designated supports and accommodations were delivered to the student through the TDS at the time of testing; the non-embedded designated supports and accommodations were provided at the time of testing to the student by the LEA. Refer to section [*1.9 Systems Overview and Functionality*](#_Systems_Overview_and_2) in [*Chapter 1: Introduction*](#_Introduction) for more details regarding the TDS.

Once a student’s IEP or Section 504 plan team decided which accessibility resource(s) the student should use, LEA ELPAC coordinators and site ELPAC coordinators used TOMS to assign designated supports and accommodations to students prior to the start of a test session.

There were three ways a student’s accessibility resource(s) could be assigned:

1. Using the ISAAP Tool to identify the accessibility resource(s) and then uploading the spreadsheet it creates into TOMS (This process is discussed in more detail in subsection [*5.6.3 Identification and Selection*](#_Identification_and_Selection).)
2. Using the Online Student Test Settings template to enter students’ assignments and then uploading the spreadsheet into TOMS
3. Entering assignments for each student individually in TOMS

If a student’s IEP or Section 504 plan team identified and designated a resource not identified in the CDE Accessibility Matrix, the LEA ELPAC coordinator or site ELPAC coordinator needed to submit a request for an unlisted resource to be approved by the CDE. The CDE then determined whether the requested unlisted resource changed the construct being measured before the student started testing.

[Appendix 5.A](#_Appendix_5.A:_Accessibility) provides information on the number of students who were assigned accommodations and designated supports.

#### Delivery of Embedded and Non-Embedded Resources to Students

Universal tools, designated supports, and accommodations can be delivered as either embedded or non-embedded resources. Embedded resources are digitally delivered features or settings available as part of the technology platform for Summative ELPAC testing. Examples of embedded resources include the expandable items, color contrast, and masking.

Non-embedded resources are available, when provided by the LEA, for both computer-based assessments and PPTs. These resources are not part of the technology platform for the computer-administered Summative ELPAC. Examples of non-embedded resources include magnification, noise buffers, and the use of a scribe.

Refer to subsection [*5.6.2 Accessibility Resource Categories*](#_Accessibility_Resource_Categories_1) for a detailed description of the accessibility resources available to students taking the Summative ELPAC.

#### Usage of Designated Supports and Accommodations

LEA ELPAC coordinators and site ELPAC coordinators were responsible for assigning their students’ test settings in TOMS before testing occurred and providing the necessary resources during testing. If a test setting was not applied before testing, then a STAIRS incident could be submitted to reset the assessment so the student could be retested with the correct accommodation or designated support (refer to subsection [*5.8.11 Security and Test Administration Incident Reporting System Process*](#_Security_and_Test_2) for additional information about STAIRS). If a test setting was accidentally assigned to a student, then a STAIRS incident could also be submitted to reset the assessment so the student could be retested without the accommodation or designated support.

Assignment and usage of test settings were directed by the LEA or site at which the student was tested. At the end of the administration, Cambium Assessment, Inc. (CAI) provided ETS with a file listing which accommodation and designated support resources were used. This was combined with a file from TOMS of assigned test settings. Only specific accommodations and designated supports were tracked. These include the embedded accommodations American Sign Language, audio transcript, and text-to-speech; and the embedded masking and non-embedded print-on-demand designated supports. However, because the TDS does not capture the usage of all embedded resources and cannot capture the usage of any non-embedded resources, these tables report only on a limited subset of the embedded resources.

Assigned designated supports, accommodations, and usage information is provided in table 5.A.1 through table 5.A.8 of [appendix 5.A](#_Appendix_5.A:_Accessibility).

### Practice and Training Tests

Practice and training tests are available publicly to LEA staff, students, parent/guardians, and any other individual for the Summative ELPAC. These tests simulate the experience of the computer-based Summative ELPAC to allow anyone to experience the assessment. For the 2022–23 school year, accommodated versions of Summative ELPAC practice and training tests were developed to include all accessibility resources—including braille, closed-captioning, text-to-speech, and audio transcripts—available on the assessment.

Students can access practice and training tests using a web browser. They allow students and administrators to familiarize themselves with the user interface and components of the TDS and help maintain the standardization of test administration. Practice and training tests are available through the Practice and Training Test website linked on the Online Practice and Training Tests Portal web page on the ELPAC website.

The practice tests, offered at each grade level or grade span, were released to prepare students for the Summative ELPAC. These tests more closely simulate the Summative ELPAC’s length and complexity and align with the Summative ELPAC blueprint.

The grade-level or grade-span specific training tests can be taken by students in all tested grade levels or grade spans. Many unique item types available on the operational assessment are covered in the training tests. The scoring guides for the practice and training tests are available on the Practice and Training Test Resources web page on the ELPAC website.

### Test Security and Confidentiality

For the operational Summative ELPAC, every person who worked with the assessments, communicated test results, or received testing information was responsible for maintaining the security and confidentiality of the assessments, including CDE staff, ETS’ staff, ETS’ subcontractors, LEA assessment coordinators, school assessment coordinators, students, parents/guardians, teachers, and cooperative educational service agency staff. ETS’ Code of Ethics required that all test information, including tangible materials (e.g., test items), confidential files (e.g., those containing personally identifiable student information), and processes related to test administration (e.g., the configurations of secure servers), were kept secure. ETS had systems in place that maintained tight security for test items and test results, as well as for student data. To ensure security for all assessments that ETS develops or handles, ETS maintains an Office of Testing Integrity (OTI), which is described in the next subsection.

All assessments within the ELPAC System, as well as the confidentiality of student information, should be protected to ensure the validity, reliability, and fairness of the results. As stated in *Standard 7.9* (American Educational Research Association, American Psychological Association, & National Council on Measurement in Education, 2014), “The documentation should explain the steps necessary to protect test materials and to prevent inappropriate exchange of information during the test administration session” (p. 128).

This section of the *Summative ELPAC Technical Report* describes the measures intended to prevent potential test security incidents prior to testing and the actions that were taken to handle security incidents occurring during or after the testing window using the STAIRS process.

#### ETS’ Office of Testing Integrity

The OTI is a division of ETS that provides quality-assurance services for all testing programs managed by ETS. This division resides in the ETS legal department. The Office of Professional Standards Compliance at ETS publishes and maintains the *ETS Standards for Quality and Fairness* (2014), which supports the OTI’s goals and activities. The *ETS Standards for Quality and Fairness* provides guidelines to help ETS’ staff design, develop, and deliver technically sound, fair, and beneficial products and services and help the public and auditors evaluate those products and services.

The OTI’s mission is to

* prevent test security violations;
* minimize any testing security violations that can impact the fairness of testing;
* minimize and investigate any security breach that threatens the validity of the interpretation of test scores; and
* report on security activities.

The OTI helps prevent misconduct on the part of students and administrators, detects potential misconduct through empirically established indicators, and resolves situations involving misconduct in a fair and equitable way that reflects the laws and professional standards governing the integrity of testing. The OTI also implements policies designed to detect and block technologies used to gain an unfair advantage.

In its pursuit of enforcing secure testing practices, the OTI strives to safeguard the various processes involved in an assessment development and administration cycle. For the Summative ELPAC, those processes included the following:

* Assessment development
* Item and data review
* Item banking
* Transfer of forms and items to the CDE and CAI
* Security of electronic files using a firewall
* Test administration
* Test delivery
* Processing and scoring
* Data management
* Statistical analysis
* Student confidentiality

#### Procedures to Maintain Standardization of Test Security

Test security requires the accounting of all secure materials—including computer-based summative test items and student data—before, during, and after each test administration. The LEA ELPAC coordinator is responsible for keeping all electronic test materials secure, keeping student information confidential, and making sure the site ELPAC coordinators and test examiners are properly trained regarding security policies and procedures.

The site ELPAC coordinator is responsible for mitigating test security incidents at the test site and for reporting incidents to the LEA ELPAC coordinator.

The test examiner is responsible for reporting testing incidents to the site ELPAC coordinator and securely destroying printed and digital media for items and passages generated by the print-on-demand feature of the TDS (CDE, 2023e).

The following measures ensured the security of the ELPAC:

* LEA ELPAC coordinators and site ELPAC coordinators must have electronically signed and submitted an “ELPAC Test Security Agreement for LEA ELPAC coordinators and site ELPAC coordinators” form in TOMS before ETS can grant the coordinators access to TOMS (5 *CCR* Section 11518.50[d]).
* Anyone having access to the testing materials must have electronically signed and submitted a “Test Security Affidavit for Test Examiners, Test Administrators, Proctors, Translators, Scribes, and Any Other Person Having Access to ELPAC Tests” form in TOMS before receiving access to any testing materials (5 *CCR* Section 11518.50[d]).
* Anyone having access to the testing materials but not having access to TOMS must have signed the *ELPAC* *Test Security Affidavit for Non-TOMS Users*, which was available as a web-based form, before receiving access to any testing materials.

In addition, it was the responsibility of every participant in the ELPAC System to report immediately any violation or suspected violation of test security or confidentiality. The test examiner reported to the site ELPAC coordinator or LEA ELPAC coordinator, who then submitted the incident using the STAIRS/Appeals process. Breach incidents were to be reported by the LEA ELPAC coordinator to the California Technical Assistance Center (CalTAC) and entered into STAIRS within 24 hours of the incident (5 *CCR* Section 11518.40[b][13]).

#### Test Security Monitoring

The LEA and school testing staff were responsible for maintaining the security and confidentiality of testing materials and devices during the testing window and reporting any irregularities or breaches that occurred. ETS performed site visits and testing procedure audits at randomly selected LEAs and test sites throughout California during the test administration of CAASPP and the ELPAC operational assessments. Audits were performed before, during, and after test administrations to observe adherence to published procedures regarding the handling of testing materials and test administration guidelines.

To provide this service, ETS used its OTI and subcontractor staff as auditors. All auditors had a minimum of a high school diploma, a valid driver’s license, and experience in security auditing or a related field. All had passed a background check conducted by the subcontracted vendor as part of the employment process.

ETS provided a final summary report of audit findings to the CDE at the end of the test administration. In addition, the OTI reported findings and recommendations to ETS’ program management on a weekly basis as audits were completed. ETS’ program management reported a summary of these findings to the CDE after a site visit. The OTI also provided individual audit reports directly to the LEA at the completion of the testing year.

#### Test Delivery

Although the Summative ELPAC transitioned to a computer-based assessment, the Writing domain for K–2 remained as a PPT, as students use the Answer Books to write in responses. There were logistics involved to ensure the timely delivery of test materials to LEAs across the state. To manage the materials ordering process, ETS used TOMS, the secure website that permitted ELPAC users to perform a number of tasks for the ELPAC system. Through TOMS, users could perform the following activities:

* Confirm or update an LEA shipping address and indicate whether an LEA can receive pallet shipments
* Order test materials in the primary test materials order window and order additional test materials, including braille and large-print forms, as needed in the supplemental test materials order window
* Add site ELPAC coordinators, test examiners, the local scoring correspondence administrator, and local scoring data entry users
* Administer the Listening domain and the Speaking—Summarize Academic Presentations item for grades three through twelve, when needed for students taking a PPT emergency form

The ETS warehouse team prepared shipments based on orders submitted by each LEA. Materials were tracked using closed-loop tracking and United Parcel Service tracking methods to ensure timely delivery of Summative ELPAC test materials. Shipping notices were included in each delivery. These notices provided LEAs with an inventory of the number of Answer Books included in the shipment. Additionally, LEAs were provided with return materials that included Group Identification Sheets—precoded, scannable forms facilitating identification of materials when they were received at ETS—and shipping labels that allowed tracking of materials that were returned to ETS for scoring.

#### Security of Electronic Files Using a Firewall

A firewall is software that prevents unauthorized entry to files, email, and other organization-specific information. All ETS data exchanges and internal email remain within the ETS firewall at all ETS locations, ranging from Princeton, New Jersey; to San Antonio, Texas; to Sacramento, California.

All electronic applications that are included in TOMS remain protected by the ETS firewall software at all times. Because of the sensitive nature of the student information processed by TOMS, the firewall plays a significant role in maintaining assurance of confidentiality among the users of this information.

Refer to section [*1.9 Systems Overview and Functionality*](#_Systems_Overview_and_2) in[*Chapter 1: Introduction*](#_Introduction) for more information on TOMS.

#### Transfer of Scores via Secure Data Exchange

Because of the confidential nature of test results, ETS uses secure file transfer protocol (SFTP) and encryption for all data file transfers; test data is never sent via email. SFTP is a method for reliable and exclusive routing of files. Files reside on a password-protected server that only authorized users can access. ETS shares an SFTP server with the CDE. On that site, ETS posts Microsoft Word and Excel files, Adobe Acrobat PDFs, or other document files for the CDE to review; the CDE returns reviewed materials in the same manner. Files are deleted upon retrieval.

The SFTP server is used as a conduit for the transfer of files; secure test data is stored only temporarily on the shared SFTP server. Industry-standard secure protocols are used to transfer test content and student data from the ETS internal data center to any external systems.

For the 2022–23 Summative ELPAC, ETS entered information about the deliverable into a web form on a SharePoint website when a file was posted. A CDE staff member monitored this log throughout the day for updates to the status of deliverables and downloaded and deleted the file from the SFTP server when its status showed that it had been posted.

#### Data Management in the Secure Database

ETS maintains a secure database to house all student demographic data and assessment results. Information associated with each student has a database relationship to the LEA, school, and grade codes as the data is collected during testing. Only individuals with the appropriate credentials can access the data. ETS builds all interfaces with the most stringent security considerations, including interfaces with data encryption for databases that store test items and student data. ETS applies best and up-to-date security practices, including system-to-system authentication and authorization, in all solution designs.

All stored test content and student data is encrypted. Industry-standard secure protocols are used to transfer test content and student data from the ETS internal data center to any external systems. ETS complies with the Family Educational Rights and Privacy Act (20 *United States Code [USC]* § 1232g; 34 *Code of Federal Regulations* Part 99) and the Children’s Online Privacy Protection Act (15 *USC* §§ 6501-6506, P.L. No. 105–277, 112 Stat. 2681–1728).

In TOMS, staff at LEAs and test sites have different levels of access appropriate to the role assigned to them (CDE, 2023d).

#### Statistical Analysis on Secure Servers

During ELPAC testing, ETS’ information technology staff members retrieve data files from CAI and load those files into a database. The ETS Data Quality Services staff extract the data from the database and perform quality-control procedures (e.g., the values of all variables are as expected) before passing files to the ETS statistical analysis group. The statistical analysis staff store the files on secure servers. All staff members involved with the data adhere to the ETS Code of Ethics and the ETS Information Protection Policies to prevent any unauthorized access to data.

#### Student Confidentiality

To meet the requirements of the Every Student Succeeds Act, as well as state requirements, LEAs must collect demographic data about students’ ethnicity, disabilities, parent/guardian education, and so forth during the school year. ETS takes every precaution to prevent any of this information from becoming public or being used for anything other than for testing and score-reporting purposes. These procedures are applied to all documents in which student demographic data appears, such as technical reports.

#### Student Test Results

##### Types of Results

The following deliverables are produced for reporting of the Summative ELPAC:

* Individual student results for computer-based assessments in the California Educator Reporting System
* Individual SSRs (electronic)
* Internet reports—available on the CDE Test Results for California’s Assessments website—aggregated by domain and state, county, LEA, or test site

##### Security of Results Files

ETS takes measures to protect files and reports that show students’ scores and reporting levels. ETS is committed to safeguarding all secure information in its possession from unauthorized access, disclosure, modification, or destruction. ETS has strict information security policies in place to protect the confidentiality of both student and client data. Staff access to production databases is limited to personnel with a business need to access the data. User IDs for production systems must be person-specific or for systems use only.

ETS has implemented network controls for routers, gateways, switches, firewalls, network tier management, and network connectivity. Routers, gateways, and switches represent points of access between networks. However, these do not contain mass storage or represent points of vulnerability, particularly for unauthorized access or denial of service.

ETS has many facilities, policies, and procedures to protect computer files. Software and procedures such as firewalls, intrusion detection, and virus control are in place to provide for physical security, data security, and disaster recovery. ETS is certified in both the ISO 27001 standard for information security and the ISO 22301 standard for business continuity, and conducts disaster recovery exercises annually.

Access to the ETS Computer Processing Center is controlled by employee and visitor identification badges. The Center is secured by doors that can be unlocked only by the badges of personnel who have functional responsibilities within its secure perimeter. Authorized personnel accompany visitors to the ETS Computer Processing Center at all times. Extensive smoke detection and alarm systems, as well as a preaction fire-control system, are installed in the Center.

##### Security of Individual Results

ETS protects individual students’ results during the following conditions:

* Scoring
* Transfer of scores by means of secure data exchange
* Reporting
* Posting of aggregated data
* Storage

In addition to protecting the confidentiality of testing materials, ETS’ Code of Ethics further prohibits ETS’ employees from financial misuse, conflicts of interest, and unauthorized appropriation of ETS’ property and resources. Specific rules are also given to ETS employees and their immediate families who may take an assessment developed by ETS. The ETS OTI verifies that these standards are followed throughout ETS. This verification is conducted, in part, by periodic on-site security audits of departments, with follow-up reports containing recommendations for improvement.

#### Security and Test Administration Incident Reporting System Process

Test security incidents, such as improprieties, irregularities, and breaches, are prohibited behaviors that give a student an unfair advantage or compromise the secure administration of the assessments, which, in turn, compromise the reliability and validity of test results (CDE, 2023b). Whether intentional or unintentional, failure by staff or students to comply with security rules constitutes a test security incident. Test security incidents impact scoring and affect students’ performance on the assessment.

LEA ELPAC coordinators and site ELPAC coordinators ensured that all test security and summative administration incidents were documented by following the prompts in TOMS that guided coordinators in their submittal. An Appeal is a request to reset, restore, reopen, invalidate, or grant a grace period extension to a student’s assessment. If an Appeal to a student’s assessment was warranted, TOMS provided additional prompts to file the Appeal.

After a case was submitted, an email containing a case number and next steps was sent to the submitter (and to the LEA ELPAC coordinator, if the case was submitted by the site ELPAC coordinator). The STAIRScase in TOMS provided the LEA ELPAC coordinator, the CDE, and the LEA Outreach Administrator with the opportunity to interact and communicate regarding the STAIRS process (CDE, 2023b).

Prior to the assessment administration, ETS and the CDE agreed that the following types of STAIRS cases would also be forwarded to the CDE:

* Student cheating or accessing unauthorized devices
* Security breach (where a student exposed secure materials)
* Student unable to review previous answers (i.e., 20-minute pause rule)

Appeals requests were reviewed by the CDE or an ETS LEA Outreach Administrator. When a request to submit an Appeal was approved, the coordinator received a system-generated email with the Appeal type that was approved (CDE, 2023b).

Types of Appeals available during the 2022–23 Summative ELPAC administration are described in table 5.7.

Table 5.7 Types of Appeals

|  |  |
| --- | --- |
| **Type of Appeal** | **Description** |
| Reset | Resetting a student’s assessment removed that assessment from the system and enabled the student to start a new assessment from the beginning. |
| Re-open | Reopening an assessment allowed a student to access an assessment that had already been submitted or had expired. |
| Restore | Restoring an assessment returned an assessment from the Reset status to its prior status. This action could be performed only on assessments that were reset previously. |
| Grace Period Extension | Permitting a grace period extension allowed the student to review previously answered items upon logging back on to the assessment after expiration of the pause rule.  A grace period extension was granted only in cases where there was a disruption to a test session, such as a technical difficulty, fire drill, schoolwide power outage, earthquake, or other act beyond the control of the test examiner. |

##### Impropriety

A testing impropriety is an unusual circumstance that has a low impact on the individual or group of students who are testing and has a low risk of potentially affecting student performance on the assessment, test security, or test validity. An example of an impropriety could be if students were making distracting gestures or sounds or talking during the test session that creates a disruption in the test session for other students, or a student left the test room without authorization.

An impropriety can be corrected and contained at a local level. An impropriety should be reported to the LEA ELPAC coordinator and site ELPAC coordinator immediately. The coordinator must report the incident within 24 hours, using the STAIRS/Appeals process in TOMS.

##### Irregularity

A testing irregularity is an unusual circumstance that impacts an individual or a group of students who are testing and may potentially affect student performance on the assessment or impact test security or test validity. An example of an irregularity could be that students were assigned an incorrect designated support or accommodation, or students cheated or provided answers to each other.

These circumstances can be corrected and contained at the local level and submitted using the STAIRS/Appeals process in TOMS. An irregularity must be reported to the LEA ELPAC coordinator and site ELPAC coordinator immediately. The coordinator must report the irregularity within 24 hours, using the online STAIRS/Appeals process in TOMS.

##### Breach

A testing breach is an event that poses a threat to the validity of the assessment. Examples may include such situations as a release of secure materials or a security or system risk. These circumstances have external implications for the CDE and may result in a decision to remove the test item(s) from the available secure item bank.

Breaches require immediate attention; a breach that was due to social media exposure on the part of a student or adult or due to media coverage of an administration was to be escalated to CalTAC via a telephone call from the LEA ELPAC coordinator. Following the call, the site ELPAC coordinator or LEA ELPAC coordinator must report the incident using the online STAIRS/Appeals process in TOMS within 24 hours. All other breaches were to be entered into STAIRS directly.

#### Appeals

For test security incidents reported in STAIRS that resulted in a need to reset, reopen, or restore individual computer-based student assessments or that required a grace period extension to be applied, the request had to be approved by the CDE. Requests to reset and reopen assessments were processed by an LEA Outreach Administrator.

In most instances, an Appeal was submitted to address a test security breach or irregularity. The LEA ELPAC coordinator or site ELPAC coordinator submitted Appeals in TOMS. All submitted Appeals were available for retrieval and reviewed by LEA and site coordinators within a given organization. However, the view of Appeals was restricted according to the user role as established in TOMS. An Appeal could be requested only by the LEA ELPAC coordinator or site ELPAC coordinator if prompted while filing a STAIRS case in TOMS (CDE, 2023b). Types of Appeals available during the 2022–23 ELPAC administration are described in table 5.7.

Table 5.8 provides the list of incident or issue types, the Appeal type associated with it, the number of incidents reported for that issue, and number of individual Statewide Student Identifiers (SSIDs) affected. The incidents involving Exposing Secure Materials or security breaches ranged from students and parents/guardians taking pictures of the testing device or test materials; to test examiners accidentally sharing the *DFAs* with parents/guardians; to test materials becoming lost at the school site because they were not kept in a secure, locked room. These counts exclude incidents that were in draft form, pending, or partially approved.

Table 5.8 Number and Types of Incidents Submitted in STAIRS

|  |  |  |  |
| --- | --- | --- | --- |
| **Description** | **Appeal Type** | **Number of Incidents** | **Total Number of SSIDs Submitted** |
| Accessibility Issue | Reset or No Appeal | 360 | 608 |
| Administered Incorrect Assessment | Reset or No Appeal | 6,894 | 10,033 |
| Administration Error | Reset or No Appeal | 479 | 1,274 |
| Data Entry Issue | Reset or Re-open | 527 | 629 |
| Expired or Accidentally Submitted Test or Domain | Re-open | 4,011 | 6,022 |
| Exposing Secure Materials | No Appeal | 21 | 8 |
| Incorrect Domain Exemption | Reset or No Appeal | 91 | 104 |
| Incorrect SSID Used | Reset or No Appeal | 1,127 | 1,611 |
| Irregularity Flag Submitted in Error | No Appeal | 0 | 0 |
| Other Issues | No Appeal | 1 | 3 |
| Restore from Reset | Restore | 331 | 547 |
| Student Cheating or Accessing Unauthorized Devices | No Appeal | 88 | 129 |
| Student Disruption | No Appeal | 49 | 110 |
| Technical Issues | Grace Period Extension or Reset or No Appeal | 367 | 172 |
| Validity Issue | No Appeal | 17 | 48 |
| **Totals:** | **N/A** | **14,363** | **21,298** |

Table 5.9 provides the counts of approved Appeals.

Table 5.9 Total Appeal Types Approved

|  |  |
| --- | --- |
| **Appeal Type Approved** | **N Appeals** |
| Reset | 11,958 |
| Re-open | 6,244 |
| Grace Period Extension | 69 |
| Restore | 494 |
| **Total:** | **18,765** |

### Technology Readiness

Students who may have limited access to technology were of particular concern as the ELPAC transitioned from PPTs to computer-based assessments, starting with the fall 2019 field test. It was important that all students be able to participate in the computer-based Summative ELPAC.

The CDE and ETS teams involved in supporting this transition recognized that appropriate resources were critical to helping ensure that lack of prior technology access did not serve as a barrier to students’ ability to demonstrate their language proficiency on these assessments. In anticipation of students coming from countries of origin where access to computers and other devices might be limited, as well as students who are technology novices in general, ETS and the CDE developed the Technology Readiness Checker for Students (CDE, 2020). This online resource was designed to help educators determine a student’s familiarity with navigating a computer-based interface. The purpose of the tool is to help educators better understand what kind of supports a student may need to increase technology familiarity.

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### Appendix 5.A: Accessibility Resource Assignment

**Notes:**

* Table 5.A.1 through table 5.A.8 include cases where both assignment and usage data are available.
* Cases where assignment data was available, but usage data was not available, are excluded.
* In the *Domain* column, “All” represents the unique students who have an accommodation or designated support across any of their testing opportunities.
* In the *Resource Type* column, “ACC” indicates an accommodation, and “DS” indicates a designated support.

Table 5.A.1 **Summative ELPAC Accessibility Resource and Usage by Domain—All**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Domain** | **Accessibility Resource** | **Resource Type** | **Students Assigned** | **Students Used** | **Percentage Used** |
| All | Any Tracked Resource | Any | 62,061 | 6,686 | 10.77 |
| Listening | Any Tracked Resource | Any | 55,523 | 1,444 | 2.60 |
| Listening | Embedded American Sign Language | ACC | 227 | 73 | 32.16 |
| Listening | Embedded Audio Transcript | ACC | 289 | 7 | 2.42 |
| Listening | Embedded Speech-to-Text | ACC | 6,984 | 12 | 0.17 |
| Listening | Embedded Text-to-Speech (English TTS) | ACC | 42,740 | 1,269 | 2.97 |
| Listening | Embedded Masking | DS | 16,553 | 80 | 0.48 |
| Listening | Non-embedded Print-on-Demand | DS | 136 | 11 | 8.09 |
| Speaking | Any Tracked Resource | Any | 60,986 | 2 | 0.00 |
| Speaking | Embedded American Sign Language | ACC | 226 | 0 | 0.00 |
| Speaking | Embedded Audio Transcript | ACC | 281 | 0 | 0.00 |
| Speaking | Embedded Speech-to-Text | ACC | 6,916 | 0 | 0.00 |
| Speaking | Embedded Text-to-Speech (English TTS) | ACC | 49,372 | 0 | 0.00 |
| Speaking | Embedded Masking | DS | 16,452 | 2 | 0.01 |
| Speaking | Non-embedded Print-on-Demand | DS | 164 | 0 | 0.00 |
| Reading | Any Tracked Resource | Any | 22,494 | 430 | 1.91 |
| Reading | Embedded Audio Transcript | ACC | 284 | 0 | 0.00 |
| Reading | Embedded Speech-to-Text | ACC | 7,014 | 52 | 0.74 |
| Reading | Embedded Masking | DS | 16,553 | 351 | 2.12 |
| Reading | Non-embedded Print-on-Demand | DS | 135 | 30 | 22.22 |
| Writing | Any Tracked Resource | Any | 52,565 | 5,314 | 10.11 |
| Writing | Embedded Audio Transcript | ACC | 257 | 0 | 0.00 |
| Writing | Embedded Speech-to-Text | ACC | 6,327 | 2,630 | 41.57 |
| Writing | Embedded Text-to-Speech (English TTS) | ACC | 43,165 | 2,961 | 6.86 |
| Writing | Embedded Masking | DS | 14,076 | 87 | 0.62 |
| Writing | Non-embedded Print-on-Demand | DS | 127 | 18 | 14.17 |

Table 5.A.2 **Summative ELPAC Accessibility Resource and Usage by Domain—Kindergarten**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Domain** | **Accessibility Resource** | **Resource Type** | **Students Assigned** | **Students Used** | **Percentage Used** |
| All | Any Tracked Resource | Any | 1,369 | 8 | 0.58 |
| Listening | Any Tracked Resource | Any | 658 | 7 | 1.06 |
| Listening | Embedded American Sign Language | ACC | 16 | 5 | 31.25 |
| Listening | Embedded Audio Transcript | ACC | 9 | 0 | 0.00 |
| Listening | Embedded Speech-to-Text | ACC | 164 | 0 | 0.00 |
| Listening | Embedded Text-to-Speech (English TTS) | ACC | 0 | 0 | 0.00 |
| Listening | Embedded Masking | DS | 505 | 1 | 0.20 |
| Listening | Non-embedded Print-on-Demand | DS | 7 | 1 | 14.29 |
| Speaking | Any Tracked Resource | Any | 1,365 | 0 | 0.00 |
| Speaking | Embedded American Sign Language | ACC | 17 | 0 | 0.00 |
| Speaking | Embedded Audio Transcript | ACC | 9 | 0 | 0.00 |
| Speaking | Embedded Speech-to-Text | ACC | 165 | 0 | 0.00 |
| Speaking | Embedded Text-to-Speech (English TTS) | ACC | 920 | 0 | 0.00 |
| Speaking | Embedded Masking | DS | 504 | 0 | 0.00 |
| Speaking | Non-embedded Print-on-Demand | DS | 7 | 0 | 0.00 |
| Reading | Any Tracked Resource | Any | 643 | 2 | 0.31 |
| Reading | Embedded Audio Transcript | ACC | 9 | 0 | 0.00 |
| Reading | Embedded Speech-to-Text | ACC | 162 | 0 | 0.00 |
| Reading | Embedded Masking | DS | 507 | 2 | 0.39 |
| Reading | Non-embedded Print-on-Demand | DS | 7 | 0 | 0.00 |
| Writing | Any Tracked Resource | Any | 0 | 0 | 0.00 |
| Writing | Embedded Audio Transcript | ACC | 0 | 0 | 0.00 |
| Writing | Embedded Speech-to-Text | ACC | 0 | 0 | 0.00 |
| Writing | Embedded Text-to-Speech (English TTS) | ACC | 0 | 0 | 0.00 |
| Writing | Embedded Masking | DS | 0 | 0 | 0.00 |
| Writing | Non-embedded Print-on-Demand | DS | 0 | 0 | 0.00 |

Table 5.A.3 **Summative ELPAC Accessibility Resource and Usage by Domain—Grade One**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Domain** | **Accessibility Resource** | **Resource Type** | **Students Assigned** | **Students Used** | **Percentage Used** |
| All | Any Tracked Resource | Any | 2,114 | 17 | 0.80 |
| Listening | Any Tracked Resource | Any | 837 | 8 | 0.96 |
| Listening | Embedded American Sign Language | ACC | 10 | 5 | 50.00 |
| Listening | Embedded Audio Transcript | ACC | 12 | 0 | 0.00 |
| Listening | Embedded Speech-to-Text | ACC | 272 | 0 | 0.00 |
| Listening | Embedded Text-to-Speech (English TTS) | ACC | 0 | 0 | 0.00 |
| Listening | Embedded Masking | DS | 595 | 3 | 0.50 |
| Listening | Non-embedded Print-on-Demand | DS | 6 | 0 | 0.00 |
| Speaking | Any Tracked Resource | Any | 2,104 | 0 | 0.00 |
| Speaking | Embedded American Sign Language | ACC | 10 | 0 | 0.00 |
| Speaking | Embedded Audio Transcript | ACC | 12 | 0 | 0.00 |
| Speaking | Embedded Speech-to-Text | ACC | 268 | 0 | 0.00 |
| Speaking | Embedded Text-to-Speech (English TTS) | ACC | 1,638 | 0 | 0.00 |
| Speaking | Embedded Masking | DS | 595 | 0 | 0.00 |
| Speaking | Non-embedded Print-on-Demand | DS | 9 | 0 | 0.00 |
| Reading | Any Tracked Resource | Any | 827 | 10 | 1.21 |
| Reading | Embedded Audio Transcript | ACC | 12 | 0 | 0.00 |
| Reading | Embedded Speech-to-Text | ACC | 273 | 0 | 0.00 |
| Reading | Embedded Masking | DS | 595 | 10 | 1.68 |
| Reading | Non-embedded Print-on-Demand | DS | 4 | 0 | 0.00 |
| Writing | Any Tracked Resource | Any | 0 | 0 | 0.00 |
| Writing | Embedded Audio Transcript | ACC | 0 | 0 | 0.00 |
| Writing | Embedded Speech-to-Text | ACC | 0 | 0 | 0.00 |
| Writing | Embedded Text-to-Speech (English TTS) | ACC | 0 | 0 | 0.00 |
| Writing | Embedded Masking | DS | 0 | 0 | 0.00 |
| Writing | Non-embedded Print-on-Demand | DS | 0 | 0 | 0.00 |

Table 5.A.4 **Summative ELPAC Accessibility Resource and Usage by Domain—Grade Two**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Domain** | **Accessibility Resource** | **Resource Type** | **Students Assigned** | **Students Used** | **Percentage Used** |
| All | Any Tracked Resource | Any | 3,837 | 19 | 0.50 |
| Listening | Any Tracked Resource | Any | 1,792 | 9 | 0.50 |
| Listening | Embedded American Sign Language | ACC | 21 | 4 | 19.05 |
| Listening | Embedded Audio Transcript | ACC | 16 | 0 | 0.00 |
| Listening | Embedded Speech-to-Text | ACC | 417 | 0 | 0.00 |
| Listening | Embedded Text-to-Speech (English TTS) | ACC | 0 | 0 | 0.00 |
| Listening | Embedded Masking | DS | 1,426 | 5 | 0.35 |
| Listening | Non-embedded Print-on-Demand | DS | 9 | 0 | 0.00 |
| Speaking | Any Tracked Resource | Any | 3,821 | 0 | 0.00 |
| Speaking | Embedded American Sign Language | ACC | 21 | 0 | 0.00 |
| Speaking | Embedded Audio Transcript | ACC | 15 | 0 | 0.00 |
| Speaking | Embedded Speech-to-Text | ACC | 417 | 0 | 0.00 |
| Speaking | Embedded Text-to-Speech (English TTS) | ACC | 2,607 | 0 | 0.00 |
| Speaking | Embedded Masking | DS | 1,432 | 0 | 0.00 |
| Speaking | Non-embedded Print-on-Demand | DS | 10 | 0 | 0.00 |
| Reading | Any Tracked Resource | Any | 1,778 | 13 | 0.73 |
| Reading | Embedded Audio Transcript | ACC | 16 | 0 | 0.00 |
| Reading | Embedded Speech-to-Text | ACC | 415 | 1 | 0.24 |
| Reading | Embedded Masking | DS | 1,430 | 10 | 0.70 |
| Reading | Non-embedded Print-on-Demand | DS | 13 | 2 | 15.38 |
| Writing | Any Tracked Resource | Any | 0 | 0 | 0.00 |
| Writing | Embedded Audio Transcript | ACC | 0 | 0 | 0.00 |
| Writing | Embedded Speech-to-Text | ACC | 0 | 0 | 0.00 |
| Writing | Embedded Text-to-Speech (English TTS) | ACC | 0 | 0 | 0.00 |
| Writing | Embedded Masking | DS | 0 | 0 | 0.00 |
| Writing | Non-embedded Print-on-Demand | DS | 0 | 0 | 0.00 |

Table 5.A.5 **Summative ELPAC Accessibility Resource and Usage by Domain—Grade Span Three Through Five**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Domain** | **Accessibility Resource** | **Resource Type** | **Students Assigned** | **Students Used** | **Percentage Used** |
| All | Any Tracked Resource | Any | 20,753 | 3,444 | 16.60 |
| Listening | Any Tracked Resource | Any | 19,769 | 559 | 2.83 |
| Listening | Embedded American Sign Language | ACC | 73 | 23 | 31.51 |
| Listening | Embedded Audio Transcript | ACC | 55 | 2 | 3.64 |
| Listening | Embedded Speech-to-Text | ACC | 3,063 | 6 | 0.20 |
| Listening | Embedded Text-to-Speech (English TTS) | ACC | 15,626 | 498 | 3.19 |
| Listening | Embedded Masking | DS | 5,769 | 30 | 0.52 |
| Listening | Non-embedded Print-on-Demand | DS | 64 | 5 | 7.81 |
| Speaking | Any Tracked Resource | Any | 20,445 | 0 | 0.00 |
| Speaking | Embedded American Sign Language | ACC | 74 | 0 | 0.00 |
| Speaking | Embedded Audio Transcript | ACC | 53 | 0 | 0.00 |
| Speaking | Embedded Speech-to-Text | ACC | 3,011 | 0 | 0.00 |
| Speaking | Embedded Text-to-Speech (English TTS) | ACC | 16,326 | 0 | 0.00 |
| Speaking | Embedded Masking | DS | 5,732 | 0 | 0.00 |
| Speaking | Non-embedded Print-on-Demand | DS | 70 | 0 | 0.00 |
| Reading | Any Tracked Resource | Any | 8,401 | 180 | 2.14 |
| Reading | Embedded Audio Transcript | ACC | 54 | 0 | 0.00 |
| Reading | Embedded Speech-to-Text | ACC | 3,081 | 30 | 0.97 |
| Reading | Embedded Masking | DS | 5,789 | 132 | 2.28 |
| Reading | Non-embedded Print-on-Demand | DS | 66 | 19 | 28.79 |
| Writing | Any Tracked Resource | Any | 19,922 | 2,959 | 14.85 |
| Writing | Embedded Audio Transcript | ACC | 56 | 0 | 0.00 |
| Writing | Embedded Speech-to-Text | ACC | 3,177 | 1,728 | 54.39 |
| Writing | Embedded Text-to-Speech (English TTS) | ACC | 15,818 | 1,414 | 8.94 |
| Writing | Embedded Masking | DS | 5,793 | 35 | 0.60 |
| Writing | Non-embedded Print-on-Demand | DS | 70 | 16 | 22.86 |

Table 5.A.6 **Summative ELPAC Accessibility Resource and Usage by Domain—Grade Span Six Through Eight**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Domain** | **Accessibility Resource** | **Resource Type** | **Students Assigned** | **Students Used** | **Percentage Used** |
| All | Any Tracked Resource | Any | 20,149 | 2,446 | 12.14 |
| Listening | Any Tracked Resource | Any | 19,262 | 563 | 2.92 |
| Listening | Embedded American Sign Language | ACC | 45 | 14 | 31.11 |
| Listening | Embedded Audio Transcript | ACC | 73 | 3 | 4.11 |
| Listening | Embedded Speech-to-Text | ACC | 2,267 | 3 | 0.13 |
| Listening | Embedded Text-to-Speech (English TTS) | ACC | 16,769 | 511 | 3.05 |
| Listening | Embedded Masking | DS | 4,373 | 33 | 0.75 |
| Listening | Non-embedded Print-on-Demand | DS | 17 | 2 | 11.76 |
| Speaking | Any Tracked Resource | Any | 19,798 | 2 | 0.01 |
| Speaking | Embedded American Sign Language | ACC | 43 | 0 | 0.00 |
| Speaking | Embedded Audio Transcript | ACC | 70 | 0 | 0.00 |
| Speaking | Embedded Speech-to-Text | ACC | 2,252 | 0 | 0.00 |
| Speaking | Embedded Text-to-Speech (English TTS) | ACC | 17,273 | 0 | 0.00 |
| Speaking | Embedded Masking | DS | 4,330 | 2 | 0.05 |
| Speaking | Non-embedded Print-on-Demand | DS | 27 | 0 | 0.00 |
| Reading | Any Tracked Resource | Any | 6,216 | 169 | 2.72 |
| Reading | Embedded Audio Transcript | ACC | 72 | 0 | 0.00 |
| Reading | Embedded Speech-to-Text | ACC | 2,290 | 20 | 0.87 |
| Reading | Embedded Masking | DS | 4,352 | 146 | 3.35 |
| Reading | Non-embedded Print-on-Demand | DS | 18 | 3 | 16.67 |
| Writing | Any Tracked Resource | Any | 19,412 | 1,910 | 9.84 |
| Writing | Embedded Audio Transcript | ACC | 73 | 0 | 0.00 |
| Writing | Embedded Speech-to-Text | ACC | 2,331 | 795 | 34.11 |
| Writing | Embedded Text-to-Speech (English TTS) | ACC | 16,931 | 1,206 | 7.12 |
| Writing | Embedded Masking | DS | 4,392 | 40 | 0.91 |
| Writing | Non-embedded Print-on-Demand | DS | 18 | 1 | 5.56 |

Table 5.A.7 **Summative ELPAC Accessibility Resource and Usage by Domain—Grade Span Nine and Ten**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Domain** | **Accessibility Resource** | **Resource Type** | **Students Assigned** | **Students Used** | **Percentage Used** |
| All | Any Tracked Resource | Any | 9,048 | 517 | 5.71 |
| Listening | Any Tracked Resource | Any | 8,622 | 188 | 2.18 |
| Listening | Embedded American Sign Language | ACC | 31 | 6 | 19.35 |
| Listening | Embedded Audio Transcript | ACC | 56 | 0 | 0.00 |
| Listening | Embedded Speech-to-Text | ACC | 510 | 0 | 0.00 |
| Listening | Embedded Text-to-Speech (English TTS) | ACC | 6,909 | 173 | 2.50 |
| Listening | Embedded Masking | DS | 2,426 | 6 | 0.25 |
| Listening | Non-embedded Print-on-Demand | DS | 22 | 3 | 13.64 |
| Speaking | Any Tracked Resource | Any | 8,794 | 0 | 0.00 |
| Speaking | Embedded American Sign Language | ACC | 29 | 0 | 0.00 |
| Speaking | Embedded Audio Transcript | ACC | 57 | 0 | 0.00 |
| Speaking | Embedded Speech-to-Text | ACC | 514 | 0 | 0.00 |
| Speaking | Embedded Text-to-Speech (English TTS) | ACC | 7,090 | 0 | 0.00 |
| Speaking | Embedded Masking | DS | 2,423 | 0 | 0.00 |
| Speaking | Non-embedded Print-on-Demand | DS | 24 | 0 | 0.00 |
| Reading | Any Tracked Resource | Any | 2,878 | 38 | 1.32 |
| Reading | Embedded Audio Transcript | ACC | 56 | 0 | 0.00 |
| Reading | Embedded Speech-to-Text | ACC | 505 | 0 | 0.00 |
| Reading | Embedded Masking | DS | 2,427 | 35 | 1.44 |
| Reading | Non-embedded Print-on-Demand | DS | 19 | 5 | 26.32 |
| Writing | Any Tracked Resource | Any | 8,656 | 326 | 3.77 |
| Writing | Embedded Audio Transcript | ACC | 60 | 0 | 0.00 |
| Writing | Embedded Speech-to-Text | ACC | 526 | 73 | 13.88 |
| Writing | Embedded Text-to-Speech (English TTS) | ACC | 6,964 | 256 | 3.68 |
| Writing | Embedded Masking | DS | 2,435 | 7 | 0.29 |
| Writing | Non-embedded Print-on-Demand | DS | 24 | 1 | 4.17 |

Table 5.A.8 **Summative ELPAC Accessibility Resource and Usage by Domain—Grade Span Eleven and Twelve**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Domain** | **Accessibility Resource** | **Resource Type** | **Students Assigned** | **Students Used** | **Percentage Used** |
| All | Any Tracked Resource | Any | 4,791 | 235 | 4.91 |
| Listening | Any Tracked Resource | Any | 4,583 | 110 | 2.40 |
| Listening | Embedded American Sign Language | ACC | 31 | 16 | 51.61 |
| Listening | Embedded Audio Transcript | ACC | 68 | 2 | 2.94 |
| Listening | Embedded Speech-to-Text | ACC | 291 | 3 | 1.03 |
| Listening | Embedded Text-to-Speech (English TTS) | ACC | 3,436 | 87 | 2.53 |
| Listening | Embedded Masking | DS | 1,459 | 2 | 0.14 |
| Listening | Non-embedded Print-on-Demand | DS | 11 | 0 | 0.00 |
| Speaking | Any Tracked Resource | Any | 4,659 | 0 | 0.00 |
| Speaking | Embedded American Sign Language | ACC | 32 | 0 | 0.00 |
| Speaking | Embedded Audio Transcript | ACC | 65 | 0 | 0.00 |
| Speaking | Embedded Speech-to-Text | ACC | 289 | 0 | 0.00 |
| Speaking | Embedded Text-to-Speech (English TTS) | ACC | 3,518 | 0 | 0.00 |
| Speaking | Embedded Masking | DS | 1,436 | 0 | 0.00 |
| Speaking | Non-embedded Print-on-Demand | DS | 17 | 0 | 0.00 |
| Reading | Any Tracked Resource | Any | 1,751 | 18 | 1.03 |
| Reading | Embedded Audio Transcript | ACC | 65 | 0 | 0.00 |
| Reading | Embedded Speech-to-Text | ACC | 288 | 1 | 0.35 |
| Reading | Embedded Masking | DS | 1,453 | 16 | 1.10 |
| Reading | Non-embedded Print-on-Demand | DS | 8 | 1 | 12.50 |
| Writing | Any Tracked Resource | Any | 4,575 | 119 | 2.60 |
| Writing | Embedded Audio Transcript | ACC | 68 | 0 | 0.00 |
| Writing | Embedded Speech-to-Text | ACC | 293 | 34 | 11.60 |
| Writing | Embedded Text-to-Speech (English TTS) | ACC | 3,452 | 85 | 2.46 |
| Writing | Embedded Masking | DS | 1,456 | 5 | 0.34 |
| Writing | Non-embedded Print-on-Demand | DS | 15 | 0 | 0.00 |

## Standard Setting

### Description

Standard setting, which also is referred to as performance level setting, refers to a class of methodologies by which one or more thresholds are used to determine performance levels. The California Department of Education (CDE) set four performance levels—*Level 1—Beginning to Develop, Level 2—Somewhat Developed, Level 3—Moderately Developed, and Level 4—Well Developed*—with three threshold cuts for each grade level and domain.

The CDE and ETS implemented an extensive performance level–setting process involving software development, item mapping, review panels, committees, workshops, and extensive validity research to set the final thresholds and performance level descriptors. For detailed information regarding this process, refer to the *Standard-Setting Technical Report for the Summative English Language Proficiency Assessments for California* (CDE, 2018a).

Note that the 2017–18 threshold scores adopted by the State Board of Education (SBE) in November 2017 for the 2017–18 administration of the Summative English Language Proficiency Assessments for California (ELPAC), established through an ELPAC standard setting workshop, were revised based on the results of the *Summative Threshold Score Validation Study* (CDE, 2018b) and other analyses. These changes were adopted by the SBE in November 2018 for the 2018–19 administration and beyond.

### References

California Department of Education. (2018a). *Standard-setting technical report for the Summative English Language Proficiency Assessments for California* [Unpublished report]. Sacramento, CA: California Department of Education.

California Department of Education. (2018b). *Summative threshold score validation study* [Unpublished report]. Sacramento, CA: California Department of Education.

## Scoring and Reporting

To determine individual students’ scores for the Summative English Language Proficiency Assessments for California (ELPAC), student item responses were scored, and individual student scores were calculated on the basis of the item responses. In addition, student test scores were aggregated to produce information for schools and local educational agencies (LEAs).

This chapter describes how various types of student responses were scored, as well as the various types of scores and score reports that were produced at the end of administration of the Summative ELPAC.

### Scoring Rubric Development

The rubrics used for the 2022–23 Summative ELPAC were the same as those used during the administration of the 2019–20 computer-based Summative ELPAC. For the ELPAC paper–pencil test (PPT), which preceded the computer-based ELPAC, ETS’ Assessment & Learning Technology Development (ALTD) group developed 9 rubrics for scoring Speaking constructed-response (CR) task types and 10 rubrics for scoring Writing CRs (California Department of Education [CDE], 2019a, 2019c).

The rubrics were revised during the 2019 range finding after the computer-based field test. The rubric evaluated for the new Writing task type at grade one was the rubric used for similar tasks at grade one, and the rubric evaluated for the new Writing task type at grade two was the rubric used for the same task type at grade span three through five on the PPT.

Rubrics were edited on the basis of feedback from the CDE and California educators during the range finding process for the computer-based field test. During the Writing range finding, changes from the PPT rubrics were made for clarification and to address keyboarding errors in grades three through twelve—educators decided that keyboarding errors on the ELPAC should be treated the same as spelling errors. As a result, in each case where the rubrics had descriptors about spelling errors, keyboarding errors were added to the descriptor. For example, the highest score point for *Writing—Write* *About an Experience* was updated to state, “Minor errors in spelling/keyboarding and punctuation may be present, but they do not impede meaning” (CDE, 2019c).

No substantial revisions were made that would change the similarity of how PPT responses and computer-based responses were scored. Proposed rubric revisions underwent ETS ALTD review and CDE review, resulting in the acceptance of rubrics for the two new Writing task types as well as minor revisions to one Speaking rubric and several Writing rubrics for the 2019–20 Summative ELPAC. The same rubrics were used in the 2022–23 Summative ELPAC.

### Scoring for Writing Constructed-Response Items

CR items are scored by either human scoring or the artificial intelligence (AI) scoring engine. Out of 24 CR items used in the 2022–23 operational forms across four grade spans (grade span three through five, grade span six through eight, grade span nine and ten, and grade span eleven and twelve), 14 of them were human-scored and 10 were AI-scored. The AI models were built and evaluated using data from the 2020–21 administration and approved for operational testing.

#### Human Scoring

Writing CR items from the test delivery system (TDS) that were to be human-scored were routed to ETS’ CR scoring systems. Hired raters received in-depth training and were certified before starting the human-scoring process. Raters were supervised by a scoring leader and provided with scoring materials such as scoring rubrics, anchor sets, and training samples within the interface. The quality-control processes for CR scoring are explained further in section[*9.5 Quality Control of Scoring*](#_Quality_Control_of_4)*.*

##### Range Finding

To prepare for scoring Speaking and Writing field test items that appeared in the 2022–23 Summative ELPAC, ETS and the Sacramento County Office of Education (SCOE) collaborated to hold Speaking range finding and Writing range finding events.

Soon after receiving Writing responses from California schools, ETS and SCOE facilitated an online range finding event for Writing field test items. The goal of the Writing range finding was to enlist California educators to select responses for each Writing prompt that exemplified each score point on each rubric. These responses were then made into sample sets to be used as benchmarks, or anchors, that exemplify each score. Educators were put into one of three groups to score items for kindergarten through grade two, grades three through eight, and grades nine through twelve.

The following steps describe how the range finding process was implemented for the Writing domain:

1. ETS’ staff prescored responses representing each score point on the rubric for each item. The number of responses selected varied by prompt and were based on the number of points and the availability of scores at each score point. The prescored responses formed a pool of potential samples from which California educators scored and recommended benchmark samples.
2. Responses were reviewed by panels of California educators (with support from ETS’ ALTD staff) using the ETS Online Network for Evaluation (ONE) system at the range finding event. Educators assigned scores and recommended benchmark samples.
3. CR specialists from ETS and SCOE selected potential benchmark samples from among those recommended and scored in consensus by educators.
4. Educators and CR specialists from ETS and SCOE met online for educators to review the potential benchmarks.
5. CDE and ETS’ content experts reviewed the samples and scores for all benchmark samples to agree upon the scores and samples to be used for specific sets. The CDE made final decisions about samples to be used as benchmarks for the field tested items.
6. ETS wrote annotations for the samples. Annotations helped raters make explicit connections between the scoring rubric and responses, thus informing their careful and accurate scoring of responses.
7. ETS created all final sample sets in the ONE system and used these samples as part of a system of training and controls for verifying the quality and consistency of scoring.

##### Composition of Writing Range Finding Review Panels

The panelists for Summative ELPAC range finding align with the qualifications outlined for the educator meetings in subsection [*3.7.3 Meetings for Review of Summative ELPAC Field Test Items*](#_Meetings_for_Review).

Selections were made to ensure representation from different cultural and linguistic groups, various-sized LEAs, county offices of education, and different geographical regions of the state. ETS and SCOE made preliminary selections, which were reviewed by the CDE, adjusted as needed, and then approved. Twenty-seven educators participated in the 2023 Writing range finding meetings.

Table 7.1 describes the self-reported qualifications for the panelists.

Table 7.1 ELPAC Writing Range Finding Qualifications

|  |  |  |
| --- | --- | --- |
| **Qualification Type** | **Qualification** | **2023 Writing Range Finding** |
| Occupation | Classroom Teacher | 15 |
| Occupation | English Learner or Literacy Coach | 6 |
| Occupation | LEA or County Office Employee | 4 |
| Occupation | Special Education Teacher | 0 |
| Occupation | School Administrator | 0 |
| Occupation | Teacher on Special Assignment | 2 |
| Special Education Services | Teacher of Students with Visual Impairments or Visual Impairments Experience | 5 |
| Highest Degree Earned | Bachelor’s Degree | 2 |
| Highest Degree Earned | Master’s Degree | 22 |
| Highest Degree Earned | Doctorate | 3 |
| Kindergarten Through Grade Twelve (K–12) Teaching Credential | Elementary Teaching (multiple subjects) | 16 |
| K–12 Teaching Credential | Secondary Teaching (single subject) | 11 |
| K–12 Teaching Credential | Special Education | 2 |
| K–12 Teaching Credential | English Learner (Crosscultural, Language, and Academic Development; Bilingual, Crosscultural, Language, and Academic Development) | 11 |
| K–12 Teaching Credential | Administrative | 6 |
| K–12 Teaching Credential | Other (Reading, Early Childhood) | 4 |
| Area of State | Northern | 7 |
| Area of State | Southern | 16 |
| Area of State | Central | 4 |
| Region Type | Urban | 14 |
| Region Type | Suburban | 11 |
| Region Type | Rural or Town | 2 |
| **Total Participants:** | **N/A** | **27** |

**Note:** Numbers may not match the totals because participants may have multiple occupations or teaching credentials or are currently working toward earning their highest degree. The information is self-reported and may not reflect all their experience and earned credentials.

##### Rater and Scoring Leader Training

Each rater who scored Writing responses from the 2022–23 Summative ELPAC was a certified ELPAC Writing rater. Certified raters completed training in the ELPAC Writing task types and demonstrated their understanding of ELPAC Writing scoring rubrics.

ETS selected scoring leaders to oversee a group of raters during the scoring process. Scoring leaders were experienced raters who had demonstrated high scoring accuracy from previous scoring projects at ETS and were invited to act as a scoring leader. For the 2022–‍23 administration of the Summative ELPAC, the scoring leader backread (read behind), guided, and retrained raters as needed. A scoring leader monitored each small group of raters on a shift, usually up to 10 to 12 raters, to assist ETS’ Scoring and Reporting Operations with scoring quality.

###### Training for Scoring Leaders

Prior to the start of scoring for the 2022–23 Summative ELPAC administration, all leaders were given time to complete self-paced training within the ONE system. Scoring leaders reviewed program-specific training documents and completed the required training sets.

###### Training for Raters

Training for raters occurred within the ONE system. Raters were provided ONE system training documents as well as program-specific information to which they could refer at any time. Prior to scoring, raters reviewed training materials in the system and practiced scoring using the prescored training sets. After raters completed a training set, they were provided with annotations for each response as a rationale for the rating assigned.

The scoring training provided for each potential rater was designed using materials developed by ETS and followed the three-step progression noted in the following subsections.

Step One: Review the Scoring Rubric and Benchmarks

Training for scoring began with an overview of the CDE-approved scoring guide, or rubric, and benchmarks (anchors) in the ONE system. The benchmarks had annotations associated with them to call the rater’s attention to specific content in the sample response.

Step Two: Score Training Sets

After orientation to the scoring rubric and the benchmark function, raters progressed through an online content training in the ONE system, in which they reviewed training sets—also called feedback sets—of sample responses. Raters assigned scores to the sample responses and received feedback in the form of annotations after each sample was scored. The feedback sets for the 2022–23 Summative ELPAC administration contained a mixed set of sample responses for each score point on the rubric.

Step Three: Set Calibration

Calibration is a system-supported control to ensure raters meet a specified standard of accuracy when scoring a series of prescored responses. Raters calibrated before they were allowed to score, meaning they scored a certain percentage of responses accurately from a set of responses called a calibration set. The passing percentage was determined by the program and number of responses in a set.

In general, calibration occurred whenever a rater began to score a particular task type for a particular grade span. The rater was allowed two chances to calibrate successfully. If the rater met the standard on the first attempt, the rater proceeded directly to scoring responses. If the rater was unsuccessful, the rater could review training sets and attempt to calibrate again with a new calibration set. If the rater was unsuccessful after both attempts, that rater was not allowed to score that task type.

Calibration can also be used to control rater and group drift, which are changes in behavior that affect scoring accuracy between test administrations. Ongoing calibration can be used throughout a scoring season to check scoring accuracy on prescored sets of responses. In the case of the 2022–23 Summative ELPAC, calibration occurred once every three days per task type scored per grade span. That is, the first time a rater scored in a task type and grade span during the 2022–23 Summative ELPAC, the rater had to calibrate. If a rater scored the same task type and grade span as the rater had scored previously but had not calibrated in that task type and grade span in the past three days, the rater had to calibrate again.

##### Scoring Monitoring and Quality Management

In addition to the calibration function described previously, raters were monitored closely for the quality of their scoring throughout the scoring window. During a scoring shift, an automated system monitored the rater performance using validity papers, which are prescored student responses inserted within the pool of responses to be scored for that prompt. The insertion rate, typically 10 percent, is set before scoring starts. Validity papers are selected by ETS’ content specialists and SCOE.

Raters do not know which responses are validity papers; however, validity papers are identified as such in the ONE system. ONE evaluates the accuracy of raters against these validity papers (percent exact agreement; percent exact plus adjacent agreement). Scoring leaders monitor scorer accuracy using this data and provide feedback to correct scoring issues. If a rater’s exact agreement percent falls below acceptable levels (set in ONE), the rater is locked out of scoring responses for that prompt and is directed to retrain (review benchmarks and training sets). The rater will have to pass a calibration set to resume scoring. These results were available to scoring leaders who monitored rater performance. If a rater exceeded allowable inaccuracy, the system automatically stopped the rater from scoring that prompt until the rater retrained and passed an accuracy test.

###### Rater Productivity and Reliability

The ONE system offered a comprehensive set of tools that the scoring leaders and scoring management staff used to monitor the progress and accuracy of individual raters and raters in aggregate. Reports produced to show rater productivity and performance indicated how many responses a rater scored during a shift.

For Summative ELPAC scoring, a minimum of 1,200 responses to Writing items were double-scored as a check for consistency. Raters were not aware when a second scoring occurred, and second raters did not have access to the first score.

Table 7.2 presents interrater reliability of Writing items. Typically, the percent of exact agreement tends to be higher for items with fewer possible score points. The expected rate of exact agreement is 90 percent for 1-point items, 80 percent for 2-point items, 70 percent for 3-point items; and 60 percent is the target for 4-point items due to the longer score scale and more score points upon which to disagree. The average percent exact agreement for all writing items in a grade level or grade span ranged from 71 percent for grade span six and eight to 95 percent for kindergarten. The average percentage of exact agreement ranged from 97 to 99 percent for all 1-point Writing items, 77 to 93 percent for 2-point items, 67 to 77 percent for 3-point items, and 59 to 61 percent for 4-point items.

In table 7.2,“Discrepant” indicates that the difference between scores is greater than one. Because 1-point items cannot have discrepant ratings, these are marked as “N/A.”

Table 7.2 Interrater Reliability of Writing Items

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Grade Level or Grade Span** | **Number of Score Points** | **Average Number of Responses** | **Average of Percent Exact** | **Average of Percent Adjacent** | **Average of Percent Discrepant** |
| Kindergarten | All Writing Items | 17,233 | 94.82 | 4.96 | 0.23 |
| Kindergarten | 1-pt Score Items | 8,610 | 96.71 | 3.29 | N/A |
| Kindergarten | 2-pt Score Items | 8,623 | 92.93 | 6.62 | 0.45 |
| 1 | All Writing Items | 14,039 | 79.24 | 19.40 | 1.35 |
| 1 | 1-pt Score Items | 1,748 | 99.20 | 0.80 | N/A |
| 1 | 2-pt Score Items | 4,074 | 86.84 | 12.96 | 0.20 |
| 1 | 3-pt Score Items | 8,217 | 71.23 | 26.55 | 2.21 |
| 2 | All Writing Items | 12,083 | 76.06 | 22.24 | 1.70 |
| 2 | 2-pt Score Items | 4,015 | 90.41 | 9.56 | 0.02 |
| 2 | 3-pt Score Items | 6,388 | 70.90 | 26.88 | 2.22 |
| 2 | 4-pt Score Items | 1,680 | 61.37 | 34.88 | 3.75 |
| 3–5 | All Writing Items | 18,783 | 72.40 | 26.39 | 1.21 |
| 3–5 | 2-pt Score Items | 9,919 | 80.61 | 19.04 | 0.34 |
| 3–5 | 3-pt Score Items | 1,888 | 76.64 | 22.56 | 0.79 |
| 3–5 | 4-pt Score Items | 6,976 | 59.56 | 37.87 | 2.57 |
| 6–8 | All Writing Items | 15,612 | 70.68 | 27.89 | 1.43 |
| 6–8 | 2-pt Score Items | 6,922 | 81.74 | 17.96 | 0.30 |
| 6–8 | 3-pt Score Items | 3,057 | 66.50 | 31.24 | 2.26 |
| 6–8 | 4-pt Score Items | 5,633 | 59.35 | 38.27 | 2.38 |
| 9–10 | All Writing Items | 15,381 | 71.20 | 27.83 | 0.96 |
| 9–10 | 2-pt Score Items | 8,366 | 77.46 | 22.24 | 0.30 |
| 9–10 | 3-pt Score Items | 1,874 | 70.86 | 28.34 | 0.80 |
| 9–10 | 4-pt Score Items | 5,141 | 61.16 | 36.74 | 2.10 |
| 11–12 | All Writing Items | 15,249 | 73.24 | 25.58 | 1.17 |
| 11–12 | 2-pt Score Items | 8,132 | 82.02 | 17.60 | 0.38 |
| 11–12 | 3-pt Score Items | 1,788 | 74.22 | 24.94 | 0.84 |
| 11–12 | 4-pt Score Items | 5,329 | 59.52 | 37.98 | 2.50 |

#### Artificial Intelligence Scoring

##### Artificial Intelligence Model Building

ETS built models for 14 field test items that were human-scored during the 2022–23 test administration. The breakdown of item counts by grade span is shown in table 7.3.

Table 7.3 Number of Items for New AI Model Building by Grade Span

|  |  |
| --- | --- |
| **Grade Span** | **Number of Field Test Items** |
| 3–5 | 4 |
| 6–8 | 2 |
| 9–10 | 4 |
| 11–12 | 4 |
| **Total:** | **14** |

Items approved by the CDE will be available for inclusion in future administrations. The evaluation process of the AI models is presented in subsection [*7.2.2.4 Model Evaluation*](#_6.5.3_Model_Evaluation).

##### Data Collection

Because field test form assignment targets the alignment of students assigned to each form to the population of all Summative ELPAC students, a simple random sampling process was performed to select those students whose data would support AI model creation. After the 2022–23 Summative ELPAC administration, ETS collected those students’ responses to the 14 CR items with human score(s) assigned. Scores were assigned by two raters to at least 1,000 of those responses for each of these items to confirm that responses to them could be consistently scored.

##### Model Training

At ETS, the steps to build AI scoring models for scoring text-based responses involved the automatic extraction and modeling of linguistic features. Natural-language processing techniques were used to extract construct-relevant linguistic features from a set of human-scored responses. Using the linguistic features extracted from the data, statistical models were built to predict the scores that human raters would assign to that response. The algorithm used was Support Vector Regression.[[4]](#footnote-5) First, machine predictions for evaluation were generated using a tenfold cross validation method that randomly split the entire dataset for an item into 10 subsets. Nine instances of the data are used to train the model, while the tenth instance is used to test the predictive ability of the model. The subsets are rotated so every response in the dataset has a machine prediction from 1 of the 10 models. The final model for each item uses the entire dataset for training.

Each model then went through an evaluation stage with multiple statistical criteria, such as Pearson’s *r* and quadratic-weighted kappa, using the predictions for each response in the dataset. The evaluations performed are reported in the next subsection.

Figure 7.1 provides a cycle chart illustrating the primary steps in the model-building and evaluation processes. First, three human-scored responses with scores of 1, 1, and 2—represented by the scored response circles in figure 7.1—are funneled to natural language processing tools to extract linguistic features. An arrow points to the next step, statistical modeling. Here, the model-building process ends. The resulting scoring model from the previous steps is sent to model evaluation.

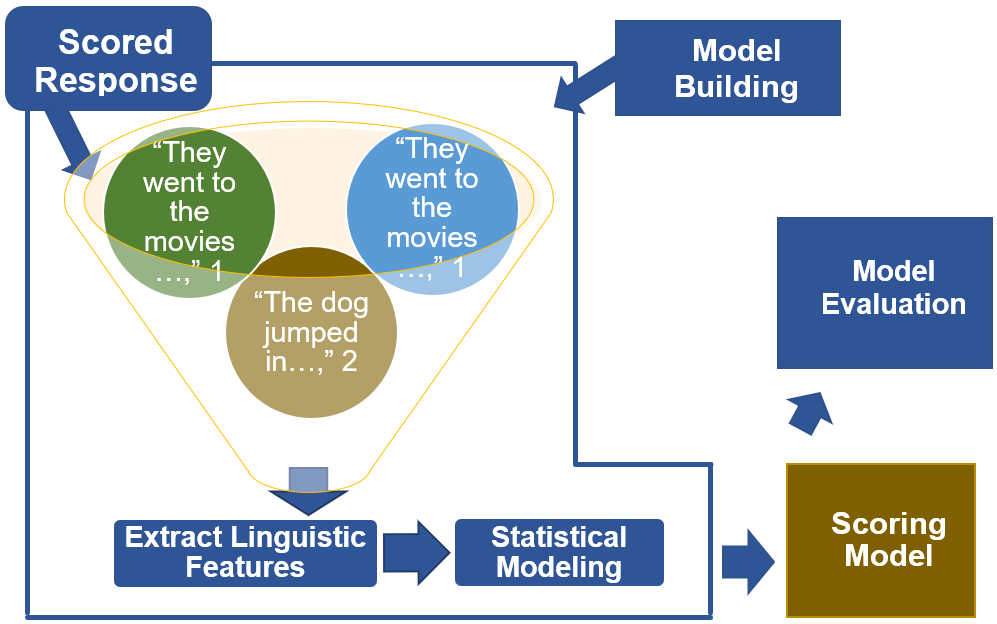


Figure 7.1 Model building and evaluation process

##### Model Evaluation

One of the important factors in building AI scoring models with good performance is the use of data with reliable human scores. A commonly used indicator for evaluating human scoring reliability is to use multiple raters on a large enough sample of responses and evaluate the extent to which they agree with each other.

Each prompt had samples of two human ratings to be used for model building and evaluation, referred to as first and second human ratings. The first human ratings were used to build and evaluate the AI models, and the second human ratings were used to determine human–human agreement statistics used to evaluate the AI scores. The second human ratings were available only on those randomly selected item responses that were double-scored.

The evaluation of an AI model includes human–human agreement, human–AI agreement, and the comparison of the two types of agreement. Human–human agreement with high values indicates that the human ratings used to build the AI model are reliable. For items to be candidates for AI score modeling, quadratic-weighted kappa (QWK) must be at least .70 for the two ratings; this suggests that the item can be consistently scored. Percent exact agreement and the consistency of mean scores for the two raters are also evaluated.

The second step in the process was evaluating the quality of ratings produced by the automated scoring models using human–AI comparisons. High human–AI agreement that is similar to high human–human agreement for the item indicates that the AI model performs as expected.

For the human–AI analyses, H1 and AI ratings were used to calculate the following:

1. H–AI QWK—The QWK between H1 and AI ratings
2. QWKDeg degradation statistic—Human–human QWK minus human–AI QWK
3. Standardized mean difference (SMD)

These measures of AI scoring quality are commonly applied to studies of AI scoring engines (for a discussion of this, refer to ETS, 2021; Rotou & Rupp, 2020; Rupp et al., 2015; Williamson et al., 2012). ETS uses a rule to apply these criteria together where all thresholds for these metrics must be met for a prompt to meet standards for AI scoring.

The criteria applied for acceptance of automated scoring of CR items includes the following:

* Human–human QWK ≥ 0.70
* Human–AI QWK ≥ 0.70
* QWK degradation ≤ 0.10
* Absolute SMD < 0.15
* Subgroup absolute SMD < 0.10

### Human Scoring for Speaking Constructed-Response Items

Responses to Speaking CR items are scored locally by test examiners for the score of record. To evaluate the quality of scores assigned by local raters scoring on-site, a sample of responses was also scored by certified raters who received in-depth training and scored online.

For all Speaking CR items, the local test examiners recorded voice responses from the TDS and the responses were routed to ETS’ CR scoring systems, where a random selection of 1,200 responses were scored by the certified raters. Raters were supervised by a scoring leader and provided scoring materials such as scoring rubrics, anchor sets, and training samples within the interface. The quality-control processes for CR scoring are explained further in section[*9.5 Quality Control of Scoring*](#_Quality_Control_of_4).

#### Range Finding

Prior to the suspension of testing associated with the novel coronavirus disease 2019 pandemic, SCOE captured video recordings of approximately 130 students who responded to the approximately 57 newly developed Speaking field test items. Subsequently, five virtual Speaking range finding events were held to proceed with sample selection. A small group of educators who had administered the ELPAC and were very familiar with the scoring of the Speaking domain were invited to participate. The educators scored the Speaking samples by task type so all items for a given task type across all grades were scored and discussed by the group. This ensures that the rubric is applied across the grade levels and grade spans in a consistent manner.

The purposes of the range finding were to enlist California educators, along with ETS and SCOE specialists, in the selection of samples to be used as anchors; and for training and calibrating (qualifying) test examiners for items for future operational administrations.

The following steps describe how the range finding process was implemented for the Speaking domain:

1. ETS’ staff, SCOE’s staff, and educators watched videos of student responses and assigned scores.
2. ETS’ staff, SCOE’s staff, and educators selected anchor samples.
3. CDE and ETS’ content experts and SCOE’s staff reviewed the samples and scores for all anchor samples to agree upon the scores and samples to be used for specific sets. The CDE made final decisions about samples to be used as anchors.

SCOE provided a final delivery of all Speaking item anchor charts to ETS and the CDE. These anchors became part of the *Directions for Administration* documents when the item was field-tested. These anchor samples became part of the training and calibration in the Moodle Training Site and were used as part of a system of training and controls for training test examiners once the items became operational.

#### Scorer Training for Speaking

The Summative ELPAC Administration and Scoring Training was delivered virtually through the Moodle Training Site as described in section [*5.2 Administration and Scoring Training*](#_Administration_and_Scoring_2), specifically on how to score the Speaking domain. LEAs were responsible for using the online resources to deliver training to test examiners. The training agenda focused primarily on Speaking task types, with binders, videos, presentations, and other resources available to participants.

#### Scorer Qualifications for Speaking

The Speaking domain was scored by test examiners in the moment. All test examiners were required to receive the Speaking scoring training from an LEA trainer.

#### Rater Productivity and Reliability

The ONE system offers a comprehensive set of tools that the scoring leaders and scoring management staff used to monitor the progress and accuracy of individual raters and raters in aggregate. Reports produced to show rater productivity and performance indicated how many responses a rater scored during a shift.

For Summative ELPAC scoring, 1,200 randomly selected responses of each Speaking prompt type were double-scored as a check for quality assurance and rater consistency. Raters were not aware when a second scoring occurred, and second raters did not have access to the first score.

Second scoring was based on audio recordings of responses that were captured by the TDS during the test administration. The scores assigned by the live local raters and by the raters scoring online were based on different scoring procedures—specifically, different modes of observation (live versus online using audio). Noting the research literature on how different modes of observation can impact interrater agreement (Helfer, 1997; Nakatsuhara, Inoue, & Taylor, 2020), ETS compared these scores for consistency as a check on the live local examiners because it is not practical to collect sufficient volumes of double-reads live in the field.

Table 7.4 presents estimates of interrater agreement of Speaking items. The expected rate of exact agreement is 90 percent for 1-point items, 80 percent for 2-point items, 70 percent for 3-‍point items, and 60 percent for 4-point items. The average percentage of exact agreement for all Speaking items ranged from 70 percent for grades nine and ten to 78 percent for grade two. The average percentage of exact agreement ranged from 92 to 96 percent for all 1-point Speaking items, 76 to 87 percent for 2-point items, 59 to 66 percent for 3-point items, and 49 to 54 percent for 4-point items. These values are below expectations, in particular for the 3-point and 4-point items. As mentioned previously, this is theorized to be because second scorings based on audio recordings differ in fundamental ways from first scorings performed by test examiners in the moment. Test examiners tended to assign higher scores than did second scorers. This phenomenon, where audio ratings are lower than live and video ratings, has been observed in other settings (Nakatsuhara, Inoue, & Taylor, 2020).

In table 7.4, “Discrepant” indicates that the difference between scores is greater than one. Because 1-point items cannot have discrepant ratings, these are listed as “N/A.”

Table 7.4 Interrater Reliability of Speaking Items

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Grade Level or Grade Span** | **Number of Score Points** | **Average Total Number of Responses** | **Average of Percent Exact** | **Average of Percent Adjacent** | **Average of Percent Discrepant** |
| Kindergarten | All Speaking Items | 15,617 | 76.70 | 21.18 | 2.12 |
| Kindergarten | 1-pt Score Items | 4,875 | 94.15 | 5.85 | N/A |
| Kindergarten | 2-pt Score Items | 7,144 | 75.98 | 22.93 | 1.09 |
| Kindergarten | 4-pt Score Items | 3,598 | 54.47 | 38.49 | 7.03 |
| 1 | All Speaking Items | 15,623 | 70.58 | 26.79 | 2.62 |
| 1 | 1-pt Score Items | 2,377 | 92.01 | 7.99 | N/A |
| 1 | 2-pt Score Items | 7,306 | 80.33 | 19.16 | 0.51 |
| 1 | 4-pt Score Items | 5,940 | 50.02 | 43.70 | 6.28 |
| 2 | All Speaking Items | 21,836 | 78.20 | 19.84 | 1.96 |
| 2 | 1-pt Score Items | 4,882 | 95.68 | 4.32 | N/A |
| 2 | 2-pt Score Items | 12,128 | 82.65 | 16.37 | 0.98 |
| 2 | 4-pt Score Items | 4,826 | 49.34 | 44.26 | 6.40 |
| 3–5 | All Speaking Items | 21,750 | 73.57 | 24.41 | 2.02 |
| 3–5 | 1-pt Score Items | 4,880 | 94.96 | 5.04 | N/A |
| 3–5 | 2-pt Score Items | 9,669 | 77.58 | 20.86 | 1.56 |
| 3–5 | 3-pt Score Items | 2,455 | 58.53 | 39.39 | 2.08 |
| 3–5 | 4-pt Score Items | 4,746 | 51.18 | 43.81 | 5.01 |
| 6–8 | All Speaking Items | 20,314 | 71.15 | 26.45 | 2.39 |
| 6–8 | 1-pt Score Items | 2,267 | 94.97 | 5.03 | N/A |
| 6–8 | 2-pt Score Items | 6,514 | 86.23 | 12.97 | 0.80 |
| 6–8 | 3-pt Score Items | 8,234 | 61.37 | 35.71 | 2.93 |
| 6–8 | 4-pt Score Items | 3,299 | 49.44 | 44.71 | 5.85 |
| 9–10 | All Speaking Items | 21,434 | 69.71 | 27.41 | 2.88 |
| 9–10 | 1-pt Score Items | 2,392 | 93.23 | 6.77 | N/A |
| 9–10 | 2-pt Score Items | 4,741 | 87.34 | 11.83 | 0.82 |
| 9–10 | 3-pt Score Items | 9,521 | 65.64 | 31.55 | 2.80 |
| 9–10 | 4-pt Score Items | 4,780 | 48.54 | 44.96 | 6.51 |
| 11–12 | All Speaking Items | 20,314 | 70.32 | 27.20 | 2.48 |
| 11–12 | 1-pt Score Items | 2,354 | 95.33 | 4.67 | N/A |
| 11–12 | 2-pt Score Items | 7,196 | 76.31 | 22.44 | 1.25 |
| 11–12 | 3-pt Score Items | 7,241 | 66.16 | 31.31 | 2.53 |
| 11–12 | 4-pt Score Items | 3,523 | 49.93 | 43.51 | 6.56 |

### Machine Scoring for Selected-Response Items

After the certification of student records for scoring, ETS transferred the records to the scoring management system. These records contained all relevant response data and identifying information for matching against the correct scoring keys. The ETS scoring engine then processed the records and produced the multiple-choice (MC) raw scores before permanently storing the results in the students’ records.

### Student Test Scores

Prior to the test administration, ETS’ ALTD staff reviewed each item and verified the answer keys. The keys were provided to Cambium Assessment, Inc. (CAI) for implementation in the TDS. After CAI finished machine-scoring item responses, scores and responses were delivered to ETS. ETS’ Enterprise Score Key Management (eSKM) system collected and calculated individual students’ overall scores (e.g., total raw scores). ETS’ Psychometric Analysis & Research (PAR) team conducted a series of psychometric analyses such as calibration, equating, and scaling using individual item scores of the test samples and produced the raw-to-scale-score conversion tables based on all psychometric analyses. When the conversion tables were implemented, eSKM produced the scale score and performance levels using the scale score ranges for students who completed the assessment.

ETS used two parallel scoring systems to produce and verify students’ scores. The eSKM scoring system received individual students’ item scores and item responses from CAI and computed individual student scores for the ETS reporting system. ETS’ PAR team also computed individual student scores based on the same data files using a statistical analysis software. The scores from the two systems were then compared for the purpose of internal quality control. Any inconsistencies found in the total raw scores were investigated and resolved. The parallel scoring process ensured the quality and accuracy of scoring and supported the transfer of scores into the database of the student records scoring system, the Test Operations Management System (TOMS).

#### Raw Scores

Raw scores for each domain were obtained by summing the number of MC items answered correctly and the number of CR item score points. The domain raw scores from Listening and Speaking were summed to compute the oral language raw score. The domain raw scores from Reading and Writing were summed to compute the written language raw score.

The number and percentage of students at each raw score for each of the composites and the total test score are reported in [appendix 7.A](#_Appendix_7.A:_Raw). Table 7.A.1 through table 7.A.13 present the raw score frequency distributions for the oral language scores for each grade level. Parallel results are presented in table 7.A.14 through table 7.A.26 for the written language composite and in table 7.A.27 through table 7.A.39 for the overall or total raw scores. Two composite scores of oral language raw score and written language raw score were summed to compute the total raw scores for each grade level.

#### Scale Scores

Raw scores are not directly comparable from administration to administration because each raw score is based on a set of items that may differ in difficulty. Instead, student performance on the Summative ELPAC is reported in terms of scale scores that express student proficiency in terms of a constant metric. Thus, a scale score of 1350 in one language skill area in one administration represents the same level of proficiency as 1350 in the same language skill area in another administration even though each scale score may represent a different raw score.

Additionally, the Summative ELPAC scale scores are vertically linked across grade levels. The vertical scaling was established using data from a 2016–17 field test administration. To implement the vertical scaling, representative sets of off-grade items (i.e., vertical scaling items) were administered to an adjacent upper grade. For example, grade two items were also administered to grades three through five students. To the extent possible, vertical scaling item sets were intended to sample the construct that included all task components and language domains that conformed to the test blueprint. So, all item types were included from the grade level below as vertical scaling items between adjacent grade levels and grade spans. Information about the item specifications can be found in the *ELPAC Test Development Specifications for the 2017 Standalone Field Tests: Summative Assessment and Initial Assessment* (ETS & SCOE, 2016). This process enables direct comparison of composite scores across consecutive grade levels.

Summative ELPAC scale scores are expressed as four-digit numbers that range from 1150 to 1950 across grade levels and grade spans. Lower scores indicate lower levels of English language proficiency, and higher scores indicate higher levels of English language proficiency.

##### Scale Score Conversions

For each language skill area, the following steps are used to establish the raw-score-to-scale-score relationship. The process begins by inverting the test characteristic curve (Stocking, 1996) where each possible raw score is mapped to a corresponding theta score. These theta scores represent a student’s ability level on a particular language skill and are transformed onto their respective language skill area through a linear transformation as described in equation 7.1:

Scale score = Intercept + Slope × (theta score) (7.1)

Refer to subsection *11.5.6 Developing Summative ELPAC Reporting Scales* in the *Summative English Language Proficiency Assessments for California Technical Report, 2017–18 Administration* (CDE, 2019b) for applicable scaling constraints (e.g., slope and intercept terms) for converting theta scores to the oral language and written language scales. Through this process, raw-to-scale-score conversion tables are established. Separate conversion tables were created for the oral language and written language composites. Spring 2022 raw-to-scale-score conversion tables for the oral language and written language composites are presented in [appendix 7.B](#_Appendix_7.B:_Raw-to-Scale-Score), table 7.B.1 through table 7.B.22.

##### Overall Scale Score

The overall scale score is calculated as the weighted average of the scale scores of the oral language and written language composite scale scores. For kindergarten, the overall scores are calculated as the weighted average scores of the two composite scores, as shown in equation 7.2:

Overall score = 0.70 × Oral language score + 0.30 × Written language score (7.2)

For grades one through twelve, the overall scores are calculated as the average scores of the two composite scores, as shown in equation 7.3:

Overall score = 0.50 × Oral language score + 0.50 × Written language score (7.3)

Refer to subsection *11.5.6 Developing Summative ELPAC Reporting Scales* in the *Summative English Language Proficiency Assessments for California Technical Report, 2017–18 Administration* (CDE, 2019b) for more details regarding how the Summative ELPAC reporting scales were established. The frequency distributions for composite and overall test scale scores are provided in [appendix 7.C](#_Appendix_7.C:_Scale_1), table 7.C.1 through table 7.C.39.

#### Performance Levels

Student Score Reports (SSRs), which are described in [*7.7.1 Online Reporting*](#_Online_Reporting_2)*,* present student-level performance results for overall score, composite scores, and domain scores. Reporting scales for the Summative ELPAC’s two composite language skills and overall scores classify each student’s performance into one of the four performance levels, which are as follows:

1. Level 1—Beginning to Develop
2. Level 2—Somewhat Developed
3. Level 3—Moderately Developed
4. Level 4—Well Developed (indicating the highest level of performance)

To guide the interpretation of the scale scores for each domain, the range of possible scale scores for each domain is divided into three levels:

1. Level 1—Beginning to Develop
2. Level 2—Somewhat/Moderately Developed
3. Level 3—Well Developed

The scale score ranges defining the various reporting levels and grade levels are presented in table 7.5.

Table 7.5 Composite Language Skills and Overall Reporting Scale Score Ranges for Each Reporting Level by Grade Level

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Grade Level** | **Assessment** | **Level 1** | **Level 2** | **Level 3** | **Level 4** |
| Kindergarten | Overall | 1150–1373 | 1374–1421 | 1422–1473 | 1474–1700 |
| Kindergarten | Oral Language | 1150–1385 | 1386–1426 | 1427–1477 | 1478–1700 |
| Kindergarten | Written Language | 1150–1345 | 1346–1409 | 1410–1462 | 1463–1700 |
| 1 | Overall | 1150–1410 | 1411–1454 | 1455–1506 | 1507–1700 |
| 1 | Oral Language | 1150–1407 | 1408–1450 | 1451–1492 | 1493–1700 |
| 1 | Written Language | 1150–1413 | 1414–1458 | 1459–1519 | 1520–1700 |
| 2 | Overall | 1150–1423 | 1424–1470 | 1471–1531 | 1532–1700 |
| 2 | Oral Language | 1150–1413 | 1414–1459 | 1460–1509 | 1510–1700 |
| 2 | Written Language | 1150–1432 | 1433–1480 | 1481–1553 | 1554–1700 |
| 3 | Overall | 1150–1447 | 1448–1487 | 1488–1534 | 1535–1800 |
| 3 | Oral Language | 1150–1434 | 1435–1465 | 1466–1511 | 1512–1800 |
| 3 | Written Language | 1150–1460 | 1461–1508 | 1509–1556 | 1557–1800 |
| 4 | Overall | 1150–1458 | 1459–1498 | 1499–1548 | 1549–1800 |
| 4 | Oral Language | 1150–1438 | 1439–1471 | 1472–1521 | 1522–1800 |
| 4 | Written Language | 1150–1477 | 1478–1524 | 1525–1574 | 1575–1800 |
| 5 | Overall | 1150–1466 | 1467–1513 | 1514–1559 | 1560–1800 |
| 5 | Oral Language | 1150–1446 | 1447–1476 | 1477–1532 | 1533–1800 |
| 5 | Written Language | 1150–1486 | 1487–1549 | 1550–1586 | 1587–1800 |
| 6 | Overall | 1150–1474 | 1475–1516 | 1517–1566 | 1567–1900 |
| 6 | Oral Language | 1150–1449 | 1450–1483 | 1484–1541 | 1542–1900 |
| 6 | Written Language | 1150–1498 | 1499–1549 | 1550–1591 | 1592–1900 |
| 7 | Overall | 1150–1480 | 1481–1526 | 1527–1575 | 1576–1900 |
| 7 | Oral Language | 1150–1455 | 1456–1497 | 1498–1553 | 1554–1900 |
| 7 | Written Language | 1150–1504 | 1505–1555 | 1556–1597 | 1598–1900 |
| 8 | Overall | 1150–1485 | 1486–1533 | 1534–1589 | 1590–1900 |
| 8 | Oral Language | 1150–1460 | 1461–1504 | 1505–1568 | 1569–1900 |
| 8 | Written Language | 1150–1509 | 1510–1561 | 1562–1609 | 1610–1900 |
| 9 | Overall | 1150–1492 | 1493–1544 | 1545–1605 | 1606–1950 |
| 9 | Oral Language | 1150–1464 | 1465–1511 | 1512–1578 | 1579–1950 |
| 9 | Written Language | 1150–1519 | 1520–1577 | 1578–1631 | 1632–1950 |
| 10 | Overall | 1150–1492 | 1493–1544 | 1545–1605 | 1606–1950 |
| 10 | Oral Language | 1150–1464 | 1465–1511 | 1512–1578 | 1579–1950 |
| 10 | Written Language | 1150–1519 | 1520–1577 | 1578–1631 | 1632–1950 |
| 11 | Overall | 1150–1499 | 1500–1554 | 1555–1614 | 1615–1950 |
| 11 | Oral Language | 1150–1469 | 1470–1513 | 1514–1582 | 1583–1950 |
| 11 | Written Language | 1150–1528 | 1529–1594 | 1595–1645 | 1646–1950 |
| 12 | Overall | 1150–1499 | 1500–1554 | 1555–1614 | 1615–1950 |
| 12 | Oral Language | 1150–1469 | 1470–1513 | 1514–1582 | 1583–1950 |
| 12 | Written Language | 1150–1528 | 1529–1594 | 1595–1645 | 1646–1950 |

The threshold scores in table 7.5 are updates to the 2017–18 threshold scores adopted by the California State Board of Education (SBE) in November 2017 for the 2017–18 administration of the Summative ELPAC. The original threshold scores established through an ELPAC standard setting workshop were revised on the basis of the results of the *Summative Threshold Score Validation Study* (CDE, 2018) and other analyses. These changes were adopted by the SBE in November 2018 for the 2018–19 administration and beyond.

### Overview of Score Aggregation Procedures

To provide meaningful results to the interest holders, test scores for a given grade level and domain are aggregated at the school, LEA or direct funded charter school, county, and state levels. The aggregated scores are generated both for selected groups and for the population. The next subsection contains a description of the types of aggregation performed on ELPAC computer-based assessment scores. Score aggregation includes only students with valid scores; refer to subsection [*7.7.2 Special Cases*](#_Special_Cases) for more information.

The number of students who tested overall and for composites by demographic student group, along with the summary of scale scores, are presented in [appendix 7.D](#_Appendix_7.D:_Means_1), in table 7.D.1 through table 7.D.13.

#### Score Distributions and Summary Statistics

Summary statistics that describe student performance on an assessment are presented in table 7.6. Included in the table are the number of students taking each assessment and the means and standard deviations (SDs) of student scores expressed in terms of all three scale scores. [Appendix 7.D](#_Appendix_7.D:_Means_1) provides this data for each grade-level composite and overall by demographic student group.

For the 2022–23 Summative ELPAC, mean scale scores generally increase across grade levels. However, the overall grade eight mean scale score is higher than the grade nine mean scale score. One cause for why the grade eight mean scale score is higher than the grade nine mean scale score may be because of the number of students taking the grade nine Initial ELPAC during fall 2022; there were roughly twice the number of students taking the grade nine Initial ELPAC as compared to the grade eight Initial ELPAC. If those students were classified as English learners based on their Initial ELPAC performance, they would take the Summative ELPAC during spring 2023. Students taking the Initial ELPAC in higher grade levels may reflect an influx of students who recently arrived in California schools and may have lower levels of English language proficiency than students with more than a year of instruction in California. Scores have historically tended to be similar in grades ten through twelve, and rounded overall means for these grade levels are identical in 2022–‍23.

Table 7.6 presents the means and SDs of scale scores for the overall assessment and each composite.

Table 7.6 Mean and SD of Overall, Oral Language, and Written Language Skill Scale Scores

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Grade Level** | **Number of Students Tested** | **Overall Scale Score Mean** | **Overall Scale Score SD** | **Oral Language Scale Score Mean** | **Oral Language Scale Score SD** | **Written Language Scale Score Mean** | **Written Language Scale Score SD** |
| Kindergarten | 137,724 | 1417 | 79 | 1422 | 77 | 1405 | 114 |
| 1 | 99,947 | 1438 | 62 | 1449 | 66 | 1426 | 73 |
| 2 | 95,667 | 1470 | 56 | 1475 | 61 | 1465 | 65 |
| 3 | 97,908 | 1485 | 46 | 1488 | 59 | 1482 | 43 |
| 4 | 94,239 | 1507 | 52 | 1510 | 66 | 1505 | 49 |
| 5 | 89,376 | 1526 | 57 | 1527 | 73 | 1524 | 53 |
| 6 | 75,878 | 1526 | 57 | 1527 | 75 | 1525 | 49 |
| 7 | 66,271 | 1538 | 64 | 1541 | 86 | 1535 | 53 |
| 8 | 60,498 | 1549 | 70 | 1553 | 95 | 1545 | 57 |
| 9 | 60,129 | 1532 | 75 | 1526 | 103 | 1537 | 58 |
| 10 | 57,330 | 1546 | 79 | 1544 | 110 | 1547 | 60 |
| 11 | 49,460 | 1546 | 73 | 1541 | 95 | 1550 | 62 |
| 12 | 39,652 | 1546 | 74 | 1543 | 98 | 1548 | 62 |

Scale score frequency distributions are presented in [appendix 7.C](#_Appendix_7.C:_Scale_1). Table 7.C.1 through table 7.C.13 provide the distributions for the oral language composite by grade level, and table 7.C.14 through table 7.C.26 present the distributions for the written language composite by grade level. Table 7.C.27 through table 7.C.39 present the distributions for the overall score by grade level.

#### Performance Levels

For the overall assessment, the percentage of students classified as having English skills that were Moderately Developed (Level 3) or Well Developed (Level 4) ranged from 38 percent for grade one to 62 percent for grade eight. Corresponding proficiency classifications for the oral language composite ranged from 48 percent of students in kindergarten to 82 percent in grade five. For the written language composite, the percentage of students classified in levels 3 and 4 ranged from 22 percent for grade twelve to 40 percent for grade eight.

The percentage of students in each proficiency level for the overall assessment and the composites is presented in table 7.7 through table 7.9. Figure 7.2 through figure 7.4 present bar graphs for the percentage of students in each performance level for overall, oral, and written language composites, using the data in table 7.7 through table 7.9, respectively. Values in the tables have been rounded and may not always sum to 100.

The percentage of students in each proficiency level for the overall assessment and the composites is also reported by demographic student groups in [appendix 7.E](#_Appendix_7.E:_Percentage_2), in table 7.E.1 through table 7.E.13. These results are further disaggregated by student economic status.

Figure 7.2 presents a graphical representation of the percentage of students at each overall performance level by grade level. These are the overall performance levels shown in table 7.7, which immediately follows.

Figure 7.2 Percentage of students at each overall performance level

Table 7.7 Percentage of Students in Each Performance Level—Overall

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Grade Level** | **Overall Performance Level 1** | **Overall Performance Level 2** | **Overall Performance Level 3** | **Overall Performance Level 4** |
| Kindergarten | 21 | 34 | 29 | 16 |
| 1 | 24 | 37 | 31 | 7 |
| 2 | 15 | 32 | 41 | 11 |
| 3 | 18 | 34 | 35 | 13 |
| 4 | 15 | 27 | 39 | 19 |
| 5 | 13 | 26 | 37 | 24 |
| 6 | 16 | 25 | 38 | 21 |
| 7 | 16 | 25 | 33 | 26 |
| 8 | 16 | 22 | 36 | 26 |
| 9 | 25 | 29 | 33 | 13 |
| 10 | 22 | 25 | 33 | 20 |
| 11 | 23 | 30 | 32 | 14 |
| 12 | 25 | 30 | 31 | 15 |

Figure 7.3 presents a graphical representation of the percentage of students at each oral language performance level by grade level. These are the oral language performance levels shown in table 7.8, which immediately follows.

Figure 7.3 Percentage of students at each oral language performance level

Table 7.8 Percentage of Students in Each Performance Level—Oral Language

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Grade Level** | **Oral Language Performance Level 1** | **Oral Language Performance Level 2** | **Oral Language Performance Level 3** | **Oral Language Performance Level 4** |
| Kindergarten | 22 | 29 | 31 | 17 |
| 1 | 16 | 28 | 37 | 18 |
| 2 | 11 | 25 | 41 | 23 |
| 3 | 14 | 17 | 36 | 33 |
| 4 | 10 | 12 | 35 | 43 |
| 5 | 9 | 8 | 41 | 41 |
| 6 | 11 | 12 | 35 | 42 |
| 7 | 13 | 12 | 36 | 40 |
| 8 | 13 | 13 | 32 | 41 |
| 9 | 21 | 20 | 35 | 24 |
| 10 | 18 | 17 | 33 | 31 |
| 11 | 18 | 19 | 37 | 27 |
| 12 | 18 | 19 | 35 | 28 |

Figure 7.4 presents a graphical representation of the percentage of students at each written language performance level by grade level. These are the written language performance levels shown in table 7.9, which immediately follows.

Figure 7.4 Percentage of students at each written language performance level

Table 7.9 Percentage of Students in Each Performance Level—Written Language

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Grade Level** | **Written Language Performance Level 1** | **Written Language Performance Level 2** | **Written Language Performance Level 3** | **Written Language Performance Level 4** |
| Kindergarten | 23 | 45 | 21 | 10 |
| 1 | 39 | 33 | 23 | 5 |
| 2 | 28 | 33 | 32 | 7 |
| 3 | 34 | 40 | 22 | 5 |
| 4 | 32 | 34 | 27 | 7 |
| 5 | 26 | 44 | 19 | 11 |
| 6 | 30 | 38 | 23 | 8 |
| 7 | 29 | 35 | 26 | 10 |
| 8 | 28 | 32 | 29 | 11 |
| 9 | 37 | 41 | 18 | 5 |
| 10 | 32 | 39 | 22 | 7 |
| 11 | 35 | 41 | 19 | 5 |
| 12 | 38 | 40 | 18 | 4 |

The percentage of students in each performance level by domain is provided in table 7.10. At the domain level, ranges of students classified at Level 3 (Well Developed) are as follows:

* Listening—Six percent in grade eleven to 36 percent in grade one
* Speaking—Fifteen percent in grade one to 68 percent in grade ten
* Reading—Five percent in grade three to 20 percent in grade eight
* Writing—One percent in grade nine to 33 percent in kindergarten

Table 7.10 Percentage of Students in Each Proficiency Level for Domains

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Grade Level** | **Listening Proficiency Level 1** | **Listening Proficiency Level 2** | **Listening Proficiency Level 3** | **Speaking Proficiency Level 1** | **Speaking Proficiency Level 2** | **Speaking Proficiency Level 3** | **Reading Proficiency Level 1** | **Reading Proficiency Level 2** | **Reading Proficiency Level 3** | **Writing Proficiency Level 1** | **Writing Proficiency Level 2** | **Writing Proficiency Level 3** |
| Kindergarten | 19 | 60 | 20 | 29 | 55 | 17 | 19 | 68 | 12 | 29 | 38 | 33 |
| 1 | 12 | 52 | 36 | 24 | 61 | 15 | 48 | 38 | 13 | 30 | 64 | 5 |
| 2 | 10 | 66 | 24 | 12 | 52 | 36 | 31 | 57 | 12 | 23 | 63 | 15 |
| 3 | 19 | 60 | 21 | 16 | 42 | 43 | 49 | 46 | 5 | 19 | 65 | 15 |
| 4 | 12 | 54 | 34 | 12 | 40 | 48 | 39 | 54 | 7 | 22 | 57 | 21 |
| 5 | 12 | 58 | 30 | 10 | 22 | 67 | 31 | 55 | 14 | 18 | 62 | 20 |
| 6 | 15 | 67 | 18 | 11 | 29 | 60 | 54 | 38 | 8 | 15 | 61 | 24 |
| 7 | 23 | 64 | 14 | 11 | 23 | 66 | 47 | 39 | 14 | 17 | 66 | 17 |
| 8 | 20 | 61 | 19 | 12 | 24 | 64 | 45 | 35 | 20 | 15 | 76 | 9 |
| 9 | 26 | 64 | 10 | 20 | 17 | 64 | 45 | 45 | 10 | 25 | 74 | 1 |
| 10 | 23 | 63 | 14 | 18 | 14 | 68 | 40 | 46 | 14 | 22 | 76 | 2 |
| 11 | 30 | 64 | 6 | 16 | 20 | 63 | 50 | 42 | 8 | 24 | 65 | 11 |
| 12 | 33 | 61 | 7 | 16 | 19 | 65 | 52 | 40 | 8 | 26 | 64 | 10 |

#### Demographic Student Group Summaries

The number and the percentage of students for selected groups with completed test scores for the operational administration of the Summative ELPAC are provided, for all grade levels and grade spans, in table 7.F.1 through table 7.F.5 in [appendix 7.F](#_Appendix_7.F:_Student). Grade spans reflect students’ enrolled grade spans during the 2022–23 school year.

In the tables, students are grouped by demographic characteristics, including gender, ethnicity, economic status, disability status, length of enrollment in US schools, migrant status, military status, homeless status, and foster youth status; the list of student groups is presented in table 7.11.

Table 7.11 Demographic Student Groups Reported

|  |  |
| --- | --- |
| **Category** | **Student Groups** |
| **Gender** | * Male * Female * Nonbinary |
| **Ethnicity** | * American Indian or Alaska Native * Asian * Native Hawaiian or Other Pacific Islander * Filipino * Hispanic or Latino * Black or African American * White * Two or more races |
| **Economic Status** | * Not economically disadvantaged * Economically disadvantaged |
| **Enrollment in US Schools** | * Less than 12 months * 12 months or more * Duration unknown |
| **Disability Status** | * Reported disabilities * No reported disabilities |
| **Migrant Status** | * Migrant education * Not migrant education |
| **Military Status** | * Armed forces family member * Not armed forces family member |
| **Homeless Status** | * Homeless * Not homeless |
| **Foster Youth Status** | * Foster youth * Not foster youth |

##### Student Group Distributions

Table 7.D.1 through table 7.D.13 in [appendix 7.D](#_Appendix_7.D:_Means_1) show consistent patterns among test takers. For all grade levels and grade spans, male students accounted for 50 to 60 percent of the assessment samples, and approximately 80 percent of the students taking the Summative ELPAC were Hispanic or Latino.

The demographic information for students taking the Summative ELPAC looked similar to the distributions of the population of Summative ELPAC test takers in 2019. These are reported in appendix 11 of the *2018–2019 Summative ELPAC Technical Report* (CDE, 2020). Across grade levels and grade spans, male students accounted for 50 to 60 percent of ELPAC test takers in both the 2018–19 Summative ELPAC PPT and 2022–23 data. Both sets of data contained more than 75 percent of Hispanic or Latino students.

### Reports Produced and Scores for Each Report

The assessments that make up the ELPAC computer-based assessments provide results or score summaries that are reported for different purposes. The four major purposes are to

1. help facilitate conversations between parents/guardians and teachers about student performance,
2. serve as a tool to help parents/guardians and teachers work together to improve student learning,
3. help schools and LEAs identify strengths and areas that need improvement in their educational programs, and
4. provide the public and policymakers with information about student performance.

This section provides detailed descriptions of the uses and applications of ELPAC reporting for students.

#### Online Reporting

TOMS is a secure website hosted by ETS that permits LEA users to manage the ELPAC computer-based assessments and to inform the TDS. This system uses a role-specific design to restrict access to certain tools and applications based on the user’s designated role. Specific functions of TOMS include the following:

* Manage user access privileges
* Manage test administration calendars and testing windows
* Manage student test assignments
* Manage and confirm the accuracy of students’ test settings (i.e., designated supports and accommodations) prior to testing
* Generate and download various reports

In addition to TOMS, another California online reporting system was used during the 2022–‍23 administration: the California Educator Reporting System (CERS).

TOMS communicated with CERS, which provided authorized users with interactive and cumulative online reports for the Summative ELPAC at the student, school, group, and LEA levels. CERS provided preliminary score data for each administered assessment available in the reporting system.

Based on the ELPAC reporting requirements, CERS provided the preliminary summative reports containing information outlining student knowledge and skills. CERS also permitted access to individual score reports, which provided preliminary score data for each administered assessment available in the reporting system. The online aggregated reports were available to be downloaded in PDF, Excel, and comma-separated value formats.

CERS was the primary source for LEA staff to analyze ELPAC results at the LEA, school, grade, classroom, or customized group level. CERS provided these reports, which can be downloaded and used to inform instruction. LEA staff with TOMS logon credentials could enter CERS through the ELPAC website to access student assessment results.

#### Special Cases

Aggregations do not include results for all students. Students who did not meet the participation rules were excluded from aggregations. In particular, students who logged on to one or two domains of one composite and did not log on to at least one domain in the other composite were excluded.

#### Types of Score Reports

There are two categories of ELPAC reports. The specific reports within each category are presented in this subsection.

1. **SSR—**The SSR was the official score report for parents/‌guardians. An SSR described the student’s results and was made available only to students who met the program’s participation requirement.
2. **LEA student data files and aggregations—**LEA student data files were available for download on demand by the LEA in TOMS to coincide with availability of the SSRs. Aggregated data was available to view in CERS and the Test Results for California’s Assessments website.

##### Student Score Reports

The Summative ELPAC SSR is the official score report for parents/guardians and includes the following information:

* Overall score and performance level
* Oral language score and performance level
* Written language score and performance level
* Domain performance levels

As mentioned previously, overall score, oral language score, and written language score placed a student within one of the four ELPAC performance levels: Beginning to Develop, Somewhat Developed, Moderately Developed, or Well Developed. For each domain, a student was placed within one of three performance levels: Beginning to Develop, Somewhat/‌Moderately Developed, or Well Developed.

ELPAC performance is compensatory, so particularly good performance in the oral language composite, for example, can compensate for performance in the written language composite that does not quite reach the Well Developed threshold; an overall performance level of Well Developed might be achieved in such a case. A student does not need to earn a performance level of Well Developed in oral language *and* written language to earn a reporting level of Well Developed for the overall score.

Scores for students who were assigned accommodations or designated supports are reported in the same way as for students who were not assigned accommodations or designated supports. Detailed information about accessibility resources is described in subsection [*5.6.2 Accessibility Resource Categories*](#_Accessibility_Resource_Categories_1).

LEAs had four options for accessing and distributing SSRs to parents/guardians:

1. Accessing electronic SSR PDFs using a locally provided parent/guardian or student portal
2. Downloading SSR PDFs from TOMS and making them available electronically using a secure local method
3. Downloading SSR PDFs from TOMS, printing them, and making them available locally
4. Purchasing paper SSRs from ETS

The LEA ELPAC coordinator could forward the appropriate reports to test sites. In the case of a locally printed Summative ELPAC SSR, the LEA sent the printed report(s) to the child’s parent/guardian. Summative ELPAC SSRs that included individual student results were not distributed beyond the student’s school.

Scores for students who were assigned accommodations or designated supports are reported in the same way as for students who were not assigned accommodations or designated supports. Detailed information about accessibility resources is described in subsection [*5.6.2 Accessibility Resource Categories*](#_Accessibility_Resource_Categories_1).

For the 2022–23 test administration, SSRs were made available to the LEAs in English, Spanish, Filipino, Chinese (Traditional), Vietnamese, and Korean. An SSR in a supported language was created if the student’s primary language as reported in the California Longitudinal Pupil Achievement Data System was one of these supported languages. The LEAs that received SSRs in supported languages received one SSR in English and another in the supported language. These reports were available as PDFs for the LEA to download from TOMS.

Further information about the SSR and its interpretation is provided on the ELPAC Starting Smarter website for California assessments.

###### Access via Student or Parent Portal

LEAs had the option to provide SSRs electronically using a locally provided parent or student portal.

Amazon Web Services—with the Amazon Simple Storage Service and the Amazon Key Management Service—ensured encrypted access for parents/guardians to view a child’s electronic SSR, which was available as a PDF.

###### Access via the Test Operations Management System

The LEA ELPAC coordinator downloaded the electronic PDFs directly from TOMS and could forward the appropriate reports to test sites. Optionally, the LEA could download and then print the SSR PDF and then send the printed report(s) to the child’s parent/‌guardian.

##### School Reports

Site ELPAC coordinators could download a file of student results for the school from TOMS.

##### Local Educational Agency Student Data Files and Aggregations

The ELPAC student data files for the LEA were available for the LEA ELPAC coordinator and site ELPAC coordinator to download from TOMS.

Preliminary student scores and aggregations were also available to LEAs prior to the release of final reports via electronic reporting, using CERS. This website permitted LEAs to view preliminary results data for all assessments taken.

Current and historical aggregated results are accessible to the public on the CDE Test Results for California’s Assessments website.

#### Score Report Applications

Summative ELPAC results, presented in SSRs, provided parents/guardians with information about their child’s progress toward English proficiency. The results were a tool for increasing communication and collaboration between parents/guardians and teachers.

Summative ELPAC results were one of the components that schools could use to help make decisions about how best to support student progress. The Summative ELPAC overall performance level of 4 was one criterion of four used for reclassification as fluent English proficient. Summative ELPAC results should never be used as the only source of information to make important decisions about a child’s education.

#### Criteria for Interpreting Test Scores

An LEA may use ELPAC computer-based summative assessment results to help make decisions about student placement, promotion, retention, or other considerations related to student achievement. However, it is important to remember that a single assessment can provide only limited information. Other relevant information should be considered as well. It is advisable for parents/guardians to evaluate their child’s strengths and weaknesses in the relevant topics by reviewing classroom work and progress reports in addition to the child’s ELPAC computer-based summative assessment results. It is also important to note that a student’s score in a domain could vary somewhat if the student were retested.

#### Criteria for Interpreting Score Reports

The user can make comparisons within the same grade level, grade span, and overall score across years. Because the ELPAC results are scaled vertically, scale scores for an assessment at one grade level may be compared to scale scores at another grade level or grade span; this allows for the comparison of the same student’s performance over time, as well as comparison of student groups at different grade levels or grade spans. Thus, users may say that proficiency for a given grade level or grade span was higher or lower one year as compared with another. However, caution should be taken when comparing scale scores from different grade levels or grade spans, especially nonadjacent grade levels within a domain, because the curricula are different across grade levels or grade spans. Comparing scores obtained in different domains should be avoided because the results are not on the same scale.

For more details on the criteria for interpreting information provided on the score reports, refer to the ELPAC Starting Smarter website for California assessments or the *2022–23 ELPAC Scoring and Reporting Guide* (CDE, 2023), which was applicable for the 2022–23 ELPAC administration.

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### Appendix 7.A: Raw Score Frequency Distributions for Composites

Table 7.A.1 Raw Score Frequency Distribution—Oral Language, Kindergarten

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 0 | 4,308 | 3.13 | 3.13 |
| 1 | 1,362 | 0.99 | 4.12 |
| 2 | 1,277 | 0.93 | 5.04 |
| 3 | 1,117 | 0.81 | 5.86 |
| 4 | 1,126 | 0.82 | 6.67 |
| 5 | 1,173 | 0.85 | 7.52 |
| 6 | 1,301 | 0.94 | 8.47 |
| 7 | 1,519 | 1.10 | 9.57 |
| 8 | 1,584 | 1.15 | 10.72 |
| 9 | 1,734 | 1.26 | 11.98 |
| 10 | 1,739 | 1.26 | 13.24 |
| 11 | 1,799 | 1.31 | 14.55 |
| 12 | 1,887 | 1.37 | 15.92 |
| 13 | 1,987 | 1.44 | 17.36 |
| 14 | 2,147 | 1.56 | 18.92 |
| 15 | 2,237 | 1.62 | 20.55 |
| 16 | 2,360 | 1.71 | 22.26 |
| 17 | 2,609 | 1.89 | 24.15 |
| 18 | 2,825 | 2.05 | 26.21 |
| 19 | 2,961 | 2.15 | 28.36 |
| 20 | 3,197 | 2.32 | 30.68 |
| 21 | 3,481 | 2.53 | 33.20 |
| 22 | 3,717 | 2.70 | 35.90 |
| 23 | 3,825 | 2.78 | 38.68 |
| 24 | 4,165 | 3.02 | 41.70 |
| 25 | 4,289 | 3.11 | 44.82 |
| 26 | 4,565 | 3.31 | 48.13 |
| 27 | 4,821 | 3.50 | 51.63 |
| 28 | 4,890 | 3.55 | 55.18 |
| 29 | 5,128 | 3.72 | 58.91 |
| 30 | 5,387 | 3.91 | 62.82 |
| 31 | 5,460 | 3.96 | 66.78 |
| 32 | 5,653 | 4.10 | 70.89 |
| 33 | 5,631 | 4.09 | 74.98 |
| 34 | 5,486 | 3.98 | 78.96 |
| 35 | 5,370 | 3.90 | 82.86 |
| 36 | 5,157 | 3.74 | 86.60 |
| 37 | 4,678 | 3.40 | 90.00 |
| 38 | 4,210 | 3.06 | 93.06 |
| 39 | 3,573 | 2.59 | 95.65 |
| 40 | 2,865 | 2.08 | 97.73 |
| 41 | 2,108 | 1.53 | 99.26 |
| 42 | 1,016 | 0.74 | 100.00 |

Table 7.A.2 Raw Score Frequency Distribution—Oral Language, Grade One

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 0 | 1,613 | 1.61 | 1.61 |
| 1 | 545 | 0.55 | 2.16 |
| 2 | 428 | 0.43 | 2.59 |
| 3 | 300 | 0.30 | 2.89 |
| 4 | 263 | 0.26 | 3.15 |
| 5 | 273 | 0.27 | 3.42 |
| 6 | 316 | 0.32 | 3.74 |
| 7 | 359 | 0.36 | 4.10 |
| 8 | 471 | 0.47 | 4.57 |
| 9 | 499 | 0.50 | 5.07 |
| 10 | 553 | 0.55 | 5.62 |
| 11 | 622 | 0.62 | 6.25 |
| 12 | 696 | 0.70 | 6.94 |
| 13 | 640 | 0.64 | 7.58 |
| 14 | 686 | 0.69 | 8.27 |
| 15 | 762 | 0.76 | 9.03 |
| 16 | 813 | 0.81 | 9.84 |
| 17 | 852 | 0.85 | 10.70 |
| 18 | 908 | 0.91 | 11.61 |
| 19 | 971 | 0.97 | 12.58 |
| 20 | 1,065 | 1.07 | 13.64 |
| 21 | 1,263 | 1.26 | 14.91 |
| 22 | 1,316 | 1.32 | 16.22 |
| 23 | 1,529 | 1.53 | 17.75 |
| 24 | 1,857 | 1.86 | 19.61 |
| 25 | 2,100 | 2.10 | 21.71 |
| 26 | 2,521 | 2.52 | 24.23 |
| 27 | 3,009 | 3.01 | 27.24 |
| 28 | 3,506 | 3.51 | 30.75 |
| 29 | 3,939 | 3.94 | 34.69 |
| 30 | 4,633 | 4.64 | 39.33 |
| 31 | 5,166 | 5.17 | 44.50 |
| 32 | 5,603 | 5.61 | 50.10 |
| 33 | 6,065 | 6.07 | 56.17 |
| 34 | 6,567 | 6.57 | 62.74 |
| 35 | 6,526 | 6.53 | 69.27 |
| 36 | 6,468 | 6.47 | 75.74 |
| 37 | 5,917 | 5.92 | 81.66 |
| 38 | 5,339 | 5.34 | 87.01 |
| 39 | 4,458 | 4.46 | 91.47 |
| 40 | 3,450 | 3.45 | 94.92 |
| 41 | 2,500 | 2.50 | 97.42 |
| 42 | 1,491 | 1.49 | 98.91 |
| 43 | 791 | 0.79 | 99.70 |
| 44 | 298 | 0.30 | 100.00 |

Table 7.A.3 Raw Score Frequency Distribution—Oral Language, Grade Two

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 0 | 503 | 0.53 | 0.53 |
| 1 | 329 | 0.34 | 0.87 |
| 2 | 249 | 0.26 | 1.13 |
| 3 | 188 | 0.20 | 1.33 |
| 4 | 164 | 0.17 | 1.50 |
| 5 | 207 | 0.22 | 1.71 |
| 6 | 256 | 0.27 | 1.98 |
| 7 | 318 | 0.33 | 2.31 |
| 8 | 384 | 0.40 | 2.72 |
| 9 | 365 | 0.38 | 3.10 |
| 10 | 340 | 0.36 | 3.45 |
| 11 | 352 | 0.37 | 3.82 |
| 12 | 303 | 0.32 | 4.14 |
| 13 | 308 | 0.32 | 4.46 |
| 14 | 254 | 0.27 | 4.72 |
| 15 | 300 | 0.31 | 5.04 |
| 16 | 370 | 0.39 | 5.43 |
| 17 | 350 | 0.37 | 5.79 |
| 18 | 409 | 0.43 | 6.22 |
| 19 | 453 | 0.47 | 6.69 |
| 20 | 499 | 0.52 | 7.21 |
| 21 | 529 | 0.55 | 7.77 |
| 22 | 586 | 0.61 | 8.38 |
| 23 | 678 | 0.71 | 9.09 |
| 24 | 793 | 0.83 | 9.92 |
| 25 | 838 | 0.88 | 10.79 |
| 26 | 976 | 1.02 | 11.81 |
| 27 | 1,109 | 1.16 | 12.97 |
| 28 | 1,314 | 1.37 | 14.35 |
| 29 | 1,517 | 1.59 | 15.93 |
| 30 | 1,696 | 1.77 | 17.70 |
| 31 | 1,984 | 2.07 | 19.78 |
| 32 | 2,262 | 2.36 | 22.14 |
| 33 | 2,655 | 2.78 | 24.92 |
| 34 | 3,068 | 3.21 | 28.12 |
| 35 | 3,411 | 3.57 | 31.69 |
| 36 | 4,055 | 4.24 | 35.93 |
| 37 | 4,616 | 4.83 | 40.75 |
| 38 | 5,088 | 5.32 | 46.07 |
| 39 | 5,491 | 5.74 | 51.81 |
| 40 | 5,781 | 6.04 | 57.85 |
| 41 | 6,039 | 6.31 | 64.17 |
| 42 | 6,171 | 6.45 | 70.62 |
| 43 | 6,100 | 6.38 | 76.99 |
| 44 | 5,722 | 5.98 | 82.98 |
| 45 | 5,114 | 5.35 | 88.32 |
| 46 | 4,095 | 4.28 | 92.60 |
| 47 | 3,190 | 3.33 | 95.94 |
| 48 | 2,196 | 2.30 | 98.23 |
| 49 | 1,237 | 1.29 | 99.52 |
| 50 | 455 | 0.48 | 100.00 |

Table 7.A.4 Raw Score Frequency Distribution—Oral Language, Grade Three

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 0 | 4 | 0.00 | 0.00 |
| 1 | 9 | 0.01 | 0.01 |
| 2 | 26 | 0.03 | 0.04 |
| 3 | 69 | 0.07 | 0.11 |
| 4 | 156 | 0.16 | 0.27 |
| 5 | 351 | 0.36 | 0.63 |
| 6 | 453 | 0.46 | 1.09 |
| 7 | 571 | 0.58 | 1.67 |
| 8 | 647 | 0.66 | 2.33 |
| 9 | 535 | 0.55 | 2.88 |
| 10 | 492 | 0.50 | 3.38 |
| 11 | 392 | 0.40 | 3.78 |
| 12 | 388 | 0.40 | 4.18 |
| 13 | 320 | 0.33 | 4.51 |
| 14 | 356 | 0.36 | 4.87 |
| 15 | 330 | 0.34 | 5.21 |
| 16 | 353 | 0.36 | 5.57 |
| 17 | 368 | 0.38 | 5.94 |
| 18 | 375 | 0.38 | 6.33 |
| 19 | 390 | 0.40 | 6.73 |
| 20 | 464 | 0.47 | 7.20 |
| 21 | 499 | 0.51 | 7.71 |
| 22 | 601 | 0.61 | 8.32 |
| 23 | 648 | 0.66 | 8.98 |
| 24 | 753 | 0.77 | 9.75 |
| 25 | 844 | 0.86 | 10.62 |
| 26 | 897 | 0.92 | 11.53 |
| 27 | 1,129 | 1.15 | 12.69 |
| 28 | 1,260 | 1.29 | 13.97 |
| 29 | 1,472 | 1.50 | 15.48 |
| 30 | 1,699 | 1.74 | 17.21 |
| 31 | 1,899 | 1.94 | 19.15 |
| 32 | 2,311 | 2.36 | 21.51 |
| 33 | 2,683 | 2.74 | 24.25 |
| 34 | 3,005 | 3.07 | 27.32 |
| 35 | 3,448 | 3.52 | 30.84 |
| 36 | 3,869 | 3.95 | 34.79 |
| 37 | 4,311 | 4.40 | 39.20 |
| 38 | 4,843 | 4.95 | 44.14 |
| 39 | 5,131 | 5.24 | 49.38 |
| 40 | 5,510 | 5.63 | 55.01 |
| 41 | 5,740 | 5.86 | 60.87 |
| 42 | 5,995 | 6.12 | 67.00 |
| 43 | 5,810 | 5.93 | 72.93 |
| 44 | 5,745 | 5.87 | 78.80 |
| 45 | 5,154 | 5.26 | 84.06 |
| 46 | 4,656 | 4.76 | 88.82 |
| 47 | 3,803 | 3.88 | 92.70 |
| 48 | 2,918 | 2.98 | 95.68 |
| 49 | 2,071 | 2.12 | 97.80 |
| 50 | 1,325 | 1.35 | 99.15 |
| 51 | 644 | 0.66 | 99.81 |
| 52 | 186 | 0.19 | 100.00 |

Table 7.A.5 Raw Score Frequency Distribution—Oral Language, Grade Four

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 0 | 2 | 0.00 | 0.00 |
| 1 | 6 | 0.01 | 0.01 |
| 2 | 32 | 0.03 | 0.04 |
| 3 | 73 | 0.08 | 0.12 |
| 4 | 151 | 0.16 | 0.28 |
| 5 | 276 | 0.29 | 0.57 |
| 6 | 406 | 0.43 | 1.00 |
| 7 | 527 | 0.56 | 1.56 |
| 8 | 539 | 0.57 | 2.13 |
| 9 | 469 | 0.50 | 2.63 |
| 10 | 359 | 0.38 | 3.01 |
| 11 | 320 | 0.34 | 3.35 |
| 12 | 291 | 0.31 | 3.66 |
| 13 | 285 | 0.30 | 3.96 |
| 14 | 220 | 0.23 | 4.20 |
| 15 | 214 | 0.23 | 4.42 |
| 16 | 241 | 0.26 | 4.68 |
| 17 | 195 | 0.21 | 4.89 |
| 18 | 231 | 0.25 | 5.13 |
| 19 | 215 | 0.23 | 5.36 |
| 20 | 277 | 0.29 | 5.65 |
| 21 | 293 | 0.31 | 5.97 |
| 22 | 307 | 0.33 | 6.29 |
| 23 | 311 | 0.33 | 6.62 |
| 24 | 375 | 0.40 | 7.02 |
| 25 | 414 | 0.44 | 7.46 |
| 26 | 515 | 0.55 | 8.01 |
| 27 | 552 | 0.59 | 8.59 |
| 28 | 633 | 0.67 | 9.26 |
| 29 | 760 | 0.81 | 10.07 |
| 30 | 907 | 0.96 | 11.03 |
| 31 | 1,105 | 1.17 | 12.20 |
| 32 | 1,203 | 1.28 | 13.48 |
| 33 | 1,433 | 1.52 | 15.00 |
| 34 | 1,727 | 1.83 | 16.83 |
| 35 | 2,098 | 2.23 | 19.06 |
| 36 | 2,491 | 2.64 | 21.70 |
| 37 | 3,007 | 3.19 | 24.89 |
| 38 | 3,445 | 3.66 | 28.55 |
| 39 | 4,099 | 4.35 | 32.90 |
| 40 | 4,771 | 5.06 | 37.96 |
| 41 | 5,334 | 5.66 | 43.62 |
| 42 | 5,850 | 6.21 | 49.83 |
| 43 | 6,381 | 6.77 | 56.60 |
| 44 | 6,915 | 7.34 | 63.94 |
| 45 | 6,801 | 7.22 | 71.16 |
| 46 | 6,621 | 7.03 | 78.18 |
| 47 | 6,153 | 6.53 | 84.71 |
| 48 | 5,444 | 5.78 | 90.49 |
| 49 | 4,112 | 4.36 | 94.85 |
| 50 | 2,832 | 3.01 | 97.86 |
| 51 | 1,512 | 1.60 | 99.46 |
| 52 | 509 | 0.54 | 100.00 |

Table 7.A.6 Raw Score Frequency Distribution—Oral Language, Grade Five

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 0 | 3 | 0.00 | 0.00 |
| 1 | 7 | 0.01 | 0.01 |
| 2 | 13 | 0.01 | 0.03 |
| 3 | 51 | 0.06 | 0.08 |
| 4 | 148 | 0.17 | 0.25 |
| 5 | 246 | 0.28 | 0.52 |
| 6 | 321 | 0.36 | 0.88 |
| 7 | 452 | 0.51 | 1.39 |
| 8 | 464 | 0.52 | 1.91 |
| 9 | 442 | 0.49 | 2.40 |
| 10 | 418 | 0.47 | 2.87 |
| 11 | 351 | 0.39 | 3.26 |
| 12 | 264 | 0.30 | 3.56 |
| 13 | 225 | 0.25 | 3.81 |
| 14 | 211 | 0.24 | 4.05 |
| 15 | 173 | 0.19 | 4.24 |
| 16 | 168 | 0.19 | 4.43 |
| 17 | 161 | 0.18 | 4.61 |
| 18 | 192 | 0.21 | 4.82 |
| 19 | 203 | 0.23 | 5.05 |
| 20 | 183 | 0.20 | 5.25 |
| 21 | 192 | 0.21 | 5.47 |
| 22 | 186 | 0.21 | 5.68 |
| 23 | 229 | 0.26 | 5.93 |
| 24 | 253 | 0.28 | 6.22 |
| 25 | 282 | 0.32 | 6.53 |
| 26 | 300 | 0.34 | 6.87 |
| 27 | 347 | 0.39 | 7.26 |
| 28 | 366 | 0.41 | 7.67 |
| 29 | 453 | 0.51 | 8.17 |
| 30 | 502 | 0.56 | 8.73 |
| 31 | 591 | 0.66 | 9.40 |
| 32 | 762 | 0.85 | 10.25 |
| 33 | 851 | 0.95 | 11.20 |
| 34 | 1,050 | 1.17 | 12.37 |
| 35 | 1,278 | 1.43 | 13.80 |
| 36 | 1,611 | 1.80 | 15.61 |
| 37 | 1,924 | 2.15 | 17.76 |
| 38 | 2,335 | 2.61 | 20.37 |
| 39 | 2,808 | 3.14 | 23.51 |
| 40 | 3,430 | 3.84 | 27.35 |
| 41 | 4,139 | 4.63 | 31.98 |
| 42 | 4,906 | 5.49 | 37.47 |
| 43 | 5,753 | 6.44 | 43.91 |
| 44 | 6,415 | 7.18 | 51.09 |
| 45 | 7,080 | 7.92 | 59.01 |
| 46 | 7,582 | 8.48 | 67.49 |
| 47 | 7,452 | 8.34 | 75.83 |
| 48 | 7,026 | 7.86 | 83.69 |
| 49 | 6,241 | 6.98 | 90.67 |
| 50 | 4,580 | 5.12 | 95.80 |
| 51 | 2,765 | 3.09 | 98.89 |
| 52 | 991 | 1.11 | 100.00 |

Table 7.A.7 Raw Score Frequency Distribution—Oral Language, Grade Six

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 0 | 1 | 0.00 | 0.00 |
| 1 | 2 | 0.00 | 0.00 |
| 2 | 14 | 0.02 | 0.02 |
| 3 | 36 | 0.05 | 0.07 |
| 4 | 89 | 0.12 | 0.19 |
| 5 | 184 | 0.24 | 0.43 |
| 6 | 281 | 0.37 | 0.80 |
| 7 | 328 | 0.43 | 1.23 |
| 8 | 392 | 0.52 | 1.75 |
| 9 | 397 | 0.52 | 2.27 |
| 10 | 343 | 0.45 | 2.72 |
| 11 | 326 | 0.43 | 3.15 |
| 12 | 309 | 0.41 | 3.56 |
| 13 | 255 | 0.34 | 3.90 |
| 14 | 239 | 0.31 | 4.21 |
| 15 | 259 | 0.34 | 4.55 |
| 16 | 217 | 0.29 | 4.84 |
| 17 | 264 | 0.35 | 5.19 |
| 18 | 239 | 0.31 | 5.50 |
| 19 | 280 | 0.37 | 5.87 |
| 20 | 294 | 0.39 | 6.26 |
| 21 | 307 | 0.40 | 6.66 |
| 22 | 374 | 0.49 | 7.16 |
| 23 | 434 | 0.57 | 7.73 |
| 24 | 439 | 0.58 | 8.31 |
| 25 | 560 | 0.74 | 9.04 |
| 26 | 639 | 0.84 | 9.89 |
| 27 | 684 | 0.90 | 10.79 |
| 28 | 750 | 0.99 | 11.78 |
| 29 | 914 | 1.20 | 12.98 |
| 30 | 1,114 | 1.47 | 14.45 |
| 31 | 1,279 | 1.69 | 16.14 |
| 32 | 1,458 | 1.92 | 18.06 |
| 33 | 1,715 | 2.26 | 20.32 |
| 34 | 1,936 | 2.55 | 22.87 |
| 35 | 2,348 | 3.09 | 25.96 |
| 36 | 2,536 | 3.34 | 29.30 |
| 37 | 2,908 | 3.83 | 33.14 |
| 38 | 3,074 | 4.05 | 37.19 |
| 39 | 3,419 | 4.51 | 41.69 |
| 40 | 3,823 | 5.04 | 46.73 |
| 41 | 4,101 | 5.40 | 52.14 |
| 42 | 4,290 | 5.65 | 57.79 |
| 43 | 4,471 | 5.89 | 63.68 |
| 44 | 4,539 | 5.98 | 69.67 |
| 45 | 4,670 | 6.15 | 75.82 |
| 46 | 4,442 | 5.85 | 81.67 |
| 47 | 3,987 | 5.25 | 86.93 |
| 48 | 3,541 | 4.67 | 91.60 |
| 49 | 2,877 | 3.79 | 95.39 |
| 50 | 1,953 | 2.57 | 97.96 |
| 51 | 1,123 | 1.48 | 99.44 |
| 52 | 424 | 0.56 | 100.00 |

Table 7.A.8 Raw Score Frequency Distribution—Oral Language, Grade Seven

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 0 | 2 | 0.00 | 0.00 |
| 1 | 3 | 0.00 | 0.01 |
| 2 | 14 | 0.02 | 0.03 |
| 3 | 48 | 0.07 | 0.10 |
| 4 | 96 | 0.14 | 0.25 |
| 5 | 167 | 0.25 | 0.50 |
| 6 | 252 | 0.38 | 0.88 |
| 7 | 390 | 0.59 | 1.47 |
| 8 | 406 | 0.61 | 2.08 |
| 9 | 439 | 0.66 | 2.74 |
| 10 | 406 | 0.61 | 3.35 |
| 11 | 375 | 0.57 | 3.92 |
| 12 | 307 | 0.46 | 4.38 |
| 13 | 265 | 0.40 | 4.78 |
| 14 | 236 | 0.36 | 5.14 |
| 15 | 249 | 0.38 | 5.52 |
| 16 | 235 | 0.35 | 5.87 |
| 17 | 203 | 0.31 | 6.18 |
| 18 | 234 | 0.35 | 6.53 |
| 19 | 235 | 0.35 | 6.88 |
| 20 | 230 | 0.35 | 7.23 |
| 21 | 297 | 0.45 | 7.68 |
| 22 | 289 | 0.44 | 8.12 |
| 23 | 318 | 0.48 | 8.60 |
| 24 | 330 | 0.50 | 9.09 |
| 25 | 370 | 0.56 | 9.65 |
| 26 | 428 | 0.65 | 10.30 |
| 27 | 491 | 0.74 | 11.04 |
| 28 | 541 | 0.82 | 11.85 |
| 29 | 607 | 0.92 | 12.77 |
| 30 | 717 | 1.08 | 13.85 |
| 31 | 805 | 1.21 | 15.07 |
| 32 | 883 | 1.33 | 16.40 |
| 33 | 1,078 | 1.63 | 18.03 |
| 34 | 1,212 | 1.83 | 19.85 |
| 35 | 1,419 | 2.14 | 22.00 |
| 36 | 1,682 | 2.54 | 24.53 |
| 37 | 1,947 | 2.94 | 27.47 |
| 38 | 2,174 | 3.28 | 30.75 |
| 39 | 2,607 | 3.93 | 34.69 |
| 40 | 2,736 | 4.13 | 38.81 |
| 41 | 3,044 | 4.59 | 43.41 |
| 42 | 3,451 | 5.21 | 48.62 |
| 43 | 3,752 | 5.66 | 54.28 |
| 44 | 3,875 | 5.85 | 60.12 |
| 45 | 4,271 | 6.44 | 66.57 |
| 46 | 4,386 | 6.62 | 73.19 |
| 47 | 4,382 | 6.61 | 79.80 |
| 48 | 4,190 | 6.32 | 86.12 |
| 49 | 3,829 | 5.78 | 91.90 |
| 50 | 2,871 | 4.33 | 96.23 |
| 51 | 1,802 | 2.72 | 98.95 |
| 52 | 695 | 1.05 | 100.00 |

Table 7.A.9 Raw Score Frequency Distribution—Oral Language, Grade Eight

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 0 | 0 | 0.00 | 0.00 |
| 1 | 0 | 0.00 | 0.00 |
| 2 | 10 | 0.02 | 0.02 |
| 3 | 52 | 0.09 | 0.10 |
| 4 | 83 | 0.14 | 0.24 |
| 5 | 155 | 0.26 | 0.50 |
| 6 | 239 | 0.40 | 0.89 |
| 7 | 338 | 0.56 | 1.45 |
| 8 | 400 | 0.66 | 2.11 |
| 9 | 395 | 0.65 | 2.76 |
| 10 | 352 | 0.58 | 3.35 |
| 11 | 345 | 0.57 | 3.92 |
| 12 | 338 | 0.56 | 4.47 |
| 13 | 282 | 0.47 | 4.94 |
| 14 | 228 | 0.38 | 5.32 |
| 15 | 238 | 0.39 | 5.71 |
| 16 | 213 | 0.35 | 6.06 |
| 17 | 232 | 0.38 | 6.45 |
| 18 | 221 | 0.37 | 6.81 |
| 19 | 218 | 0.36 | 7.17 |
| 20 | 223 | 0.37 | 7.54 |
| 21 | 246 | 0.41 | 7.95 |
| 22 | 244 | 0.40 | 8.35 |
| 23 | 262 | 0.43 | 8.78 |
| 24 | 344 | 0.57 | 9.35 |
| 25 | 284 | 0.47 | 9.82 |
| 26 | 337 | 0.56 | 10.38 |
| 27 | 384 | 0.63 | 11.01 |
| 28 | 431 | 0.71 | 11.73 |
| 29 | 442 | 0.73 | 12.46 |
| 30 | 548 | 0.91 | 13.36 |
| 31 | 618 | 1.02 | 14.38 |
| 32 | 649 | 1.07 | 15.46 |
| 33 | 780 | 1.29 | 16.75 |
| 34 | 916 | 1.51 | 18.26 |
| 35 | 1,013 | 1.67 | 19.93 |
| 36 | 1,250 | 2.07 | 22.00 |
| 37 | 1,324 | 2.19 | 24.19 |
| 38 | 1,606 | 2.65 | 26.84 |
| 39 | 1,853 | 3.06 | 29.91 |
| 40 | 2,052 | 3.39 | 33.30 |
| 41 | 2,367 | 3.91 | 37.21 |
| 42 | 2,672 | 4.42 | 41.63 |
| 43 | 3,105 | 5.13 | 46.76 |
| 44 | 3,494 | 5.78 | 52.54 |
| 45 | 3,821 | 6.32 | 58.85 |
| 46 | 4,232 | 7.00 | 65.85 |
| 47 | 4,482 | 7.41 | 73.26 |
| 48 | 4,637 | 7.66 | 80.92 |
| 49 | 4,226 | 6.99 | 87.91 |
| 50 | 3,632 | 6.00 | 93.91 |
| 51 | 2,614 | 4.32 | 98.23 |
| 52 | 1,071 | 1.77 | 100.00 |

Table 7.A.10 Raw Score Frequency Distribution—Oral Language, Grade Nine

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 0 | 0 | 0.00 | 0.00 |
| 1 | 2 | 0.00 | 0.00 |
| 2 | 39 | 0.06 | 0.07 |
| 3 | 124 | 0.21 | 0.27 |
| 4 | 263 | 0.44 | 0.71 |
| 5 | 495 | 0.82 | 1.54 |
| 6 | 724 | 1.20 | 2.74 |
| 7 | 893 | 1.49 | 4.22 |
| 8 | 833 | 1.39 | 5.61 |
| 9 | 815 | 1.36 | 6.97 |
| 10 | 583 | 0.97 | 7.93 |
| 11 | 518 | 0.86 | 8.80 |
| 12 | 388 | 0.65 | 9.44 |
| 13 | 283 | 0.47 | 9.91 |
| 14 | 284 | 0.47 | 10.38 |
| 15 | 278 | 0.46 | 10.85 |
| 16 | 248 | 0.41 | 11.26 |
| 17 | 255 | 0.42 | 11.68 |
| 18 | 269 | 0.45 | 12.13 |
| 19 | 247 | 0.41 | 12.54 |
| 20 | 258 | 0.43 | 12.97 |
| 21 | 238 | 0.40 | 13.37 |
| 22 | 255 | 0.42 | 13.79 |
| 23 | 295 | 0.49 | 14.28 |
| 24 | 312 | 0.52 | 14.80 |
| 25 | 361 | 0.60 | 15.40 |
| 26 | 376 | 0.63 | 16.03 |
| 27 | 414 | 0.69 | 16.71 |
| 28 | 477 | 0.79 | 17.51 |
| 29 | 519 | 0.86 | 18.37 |
| 30 | 610 | 1.01 | 19.38 |
| 31 | 724 | 1.20 | 20.59 |
| 32 | 837 | 1.39 | 21.98 |
| 33 | 1,003 | 1.67 | 23.65 |
| 34 | 1,132 | 1.88 | 25.53 |
| 35 | 1,376 | 2.29 | 27.82 |
| 36 | 1,564 | 2.60 | 30.42 |
| 37 | 1,811 | 3.01 | 33.43 |
| 38 | 2,061 | 3.43 | 36.86 |
| 39 | 2,412 | 4.01 | 40.87 |
| 40 | 2,733 | 4.55 | 45.42 |
| 41 | 3,125 | 5.20 | 50.61 |
| 42 | 3,436 | 5.71 | 56.33 |
| 43 | 3,734 | 6.21 | 62.54 |
| 44 | 3,945 | 6.56 | 69.10 |
| 45 | 4,098 | 6.82 | 75.92 |
| 46 | 3,947 | 6.56 | 82.48 |
| 47 | 3,582 | 5.96 | 88.44 |
| 48 | 2,873 | 4.78 | 93.21 |
| 49 | 2,071 | 3.44 | 96.66 |
| 50 | 1,276 | 2.12 | 98.78 |
| 51 | 568 | 0.94 | 99.73 |
| 52 | 165 | 0.27 | 100.00 |

Table 7.A.11 Raw Score Frequency Distribution—Oral Language, Grade Ten

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 0 | 3 | 0.01 | 0.01 |
| 1 | 5 | 0.01 | 0.01 |
| 2 | 30 | 0.05 | 0.07 |
| 3 | 81 | 0.14 | 0.21 |
| 4 | 146 | 0.25 | 0.46 |
| 5 | 350 | 0.61 | 1.07 |
| 6 | 478 | 0.83 | 1.91 |
| 7 | 623 | 1.09 | 2.99 |
| 8 | 643 | 1.12 | 4.11 |
| 9 | 645 | 1.13 | 5.24 |
| 10 | 569 | 0.99 | 6.23 |
| 11 | 426 | 0.74 | 6.98 |
| 12 | 354 | 0.62 | 7.59 |
| 13 | 291 | 0.51 | 8.10 |
| 14 | 272 | 0.47 | 8.57 |
| 15 | 254 | 0.44 | 9.02 |
| 16 | 279 | 0.49 | 9.50 |
| 17 | 246 | 0.43 | 9.93 |
| 18 | 242 | 0.42 | 10.36 |
| 19 | 228 | 0.40 | 10.75 |
| 20 | 230 | 0.40 | 11.15 |
| 21 | 270 | 0.47 | 11.63 |
| 22 | 285 | 0.50 | 12.12 |
| 23 | 298 | 0.52 | 12.64 |
| 24 | 277 | 0.48 | 13.13 |
| 25 | 333 | 0.58 | 13.71 |
| 26 | 370 | 0.65 | 14.35 |
| 27 | 386 | 0.67 | 15.03 |
| 28 | 411 | 0.72 | 15.74 |
| 29 | 433 | 0.76 | 16.50 |
| 30 | 526 | 0.92 | 17.41 |
| 31 | 571 | 1.00 | 18.41 |
| 32 | 691 | 1.21 | 19.62 |
| 33 | 755 | 1.32 | 20.93 |
| 34 | 900 | 1.57 | 22.50 |
| 35 | 1,026 | 1.79 | 24.29 |
| 36 | 1,257 | 2.19 | 26.49 |
| 37 | 1,437 | 2.51 | 28.99 |
| 38 | 1,609 | 2.81 | 31.80 |
| 39 | 1,922 | 3.35 | 35.15 |
| 40 | 2,261 | 3.94 | 39.09 |
| 41 | 2,602 | 4.54 | 43.63 |
| 42 | 2,983 | 5.20 | 48.84 |
| 43 | 3,343 | 5.83 | 54.67 |
| 44 | 3,745 | 6.53 | 61.20 |
| 45 | 4,251 | 7.41 | 68.62 |
| 46 | 4,184 | 7.30 | 75.91 |
| 47 | 4,023 | 7.02 | 82.93 |
| 48 | 3,665 | 6.39 | 89.32 |
| 49 | 2,919 | 5.09 | 94.41 |
| 50 | 1,943 | 3.39 | 97.80 |
| 51 | 937 | 1.63 | 99.44 |
| 52 | 322 | 0.56 | 100.00 |

Table 7.A.12 Raw Score Frequency Distribution—Oral Language, Grade Eleven

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 0 | 0 | 0.00 | 0.00 |
| 1 | 2 | 0.00 | 0.00 |
| 2 | 10 | 0.02 | 0.02 |
| 3 | 38 | 0.08 | 0.10 |
| 4 | 99 | 0.20 | 0.30 |
| 5 | 229 | 0.46 | 0.76 |
| 6 | 359 | 0.73 | 1.49 |
| 7 | 430 | 0.87 | 2.36 |
| 8 | 480 | 0.97 | 3.33 |
| 9 | 455 | 0.92 | 4.25 |
| 10 | 394 | 0.80 | 5.05 |
| 11 | 355 | 0.72 | 5.76 |
| 12 | 293 | 0.59 | 6.36 |
| 13 | 214 | 0.43 | 6.79 |
| 14 | 245 | 0.50 | 7.28 |
| 15 | 214 | 0.43 | 7.72 |
| 16 | 231 | 0.47 | 8.18 |
| 17 | 213 | 0.43 | 8.62 |
| 18 | 220 | 0.44 | 9.06 |
| 19 | 256 | 0.52 | 9.58 |
| 20 | 254 | 0.51 | 10.09 |
| 21 | 266 | 0.54 | 10.63 |
| 22 | 277 | 0.56 | 11.19 |
| 23 | 325 | 0.66 | 11.85 |
| 24 | 313 | 0.63 | 12.48 |
| 25 | 331 | 0.67 | 13.15 |
| 26 | 375 | 0.76 | 13.91 |
| 27 | 390 | 0.79 | 14.69 |
| 28 | 485 | 0.98 | 15.68 |
| 29 | 494 | 1.00 | 16.67 |
| 30 | 589 | 1.19 | 17.86 |
| 31 | 687 | 1.39 | 19.25 |
| 32 | 824 | 1.67 | 20.92 |
| 33 | 893 | 1.81 | 22.73 |
| 34 | 1,059 | 2.14 | 24.87 |
| 35 | 1,163 | 2.35 | 27.22 |
| 36 | 1,357 | 2.74 | 29.96 |
| 37 | 1,496 | 3.02 | 32.99 |
| 38 | 1,699 | 3.44 | 36.42 |
| 39 | 1,925 | 3.89 | 40.31 |
| 40 | 2,119 | 4.28 | 44.60 |
| 41 | 2,399 | 4.85 | 49.45 |
| 42 | 2,602 | 5.26 | 54.71 |
| 43 | 2,850 | 5.76 | 60.47 |
| 44 | 3,088 | 6.24 | 66.71 |
| 45 | 3,190 | 6.45 | 73.16 |
| 46 | 3,291 | 6.65 | 79.82 |
| 47 | 3,053 | 6.17 | 85.99 |
| 48 | 2,635 | 5.33 | 91.32 |
| 49 | 2,015 | 4.07 | 95.39 |
| 50 | 1,333 | 2.70 | 98.09 |
| 51 | 743 | 1.50 | 99.59 |
| 52 | 203 | 0.41 | 100.00 |

Table 7.A.13 Raw Score Frequency Distribution—Oral Language, Grade Twelve

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 0 | 1 | 0.00 | 0.00 |
| 1 | 1 | 0.00 | 0.01 |
| 2 | 7 | 0.02 | 0.02 |
| 3 | 41 | 0.10 | 0.13 |
| 4 | 80 | 0.20 | 0.33 |
| 5 | 167 | 0.42 | 0.75 |
| 6 | 246 | 0.62 | 1.37 |
| 7 | 340 | 0.86 | 2.23 |
| 8 | 332 | 0.84 | 3.06 |
| 9 | 341 | 0.86 | 3.92 |
| 10 | 316 | 0.80 | 4.72 |
| 11 | 265 | 0.67 | 5.39 |
| 12 | 250 | 0.63 | 6.02 |
| 13 | 177 | 0.45 | 6.47 |
| 14 | 191 | 0.48 | 6.95 |
| 15 | 165 | 0.42 | 7.36 |
| 16 | 207 | 0.52 | 7.89 |
| 17 | 184 | 0.46 | 8.35 |
| 18 | 209 | 0.53 | 8.88 |
| 19 | 202 | 0.51 | 9.39 |
| 20 | 218 | 0.55 | 9.94 |
| 21 | 231 | 0.58 | 10.52 |
| 22 | 210 | 0.53 | 11.05 |
| 23 | 238 | 0.60 | 11.65 |
| 24 | 259 | 0.65 | 12.30 |
| 25 | 278 | 0.70 | 13.00 |
| 26 | 331 | 0.83 | 13.84 |
| 27 | 387 | 0.98 | 14.81 |
| 28 | 388 | 0.98 | 15.79 |
| 29 | 448 | 1.13 | 16.92 |
| 30 | 488 | 1.23 | 18.15 |
| 31 | 552 | 1.39 | 19.55 |
| 32 | 685 | 1.73 | 21.27 |
| 33 | 723 | 1.82 | 23.10 |
| 34 | 870 | 2.19 | 25.29 |
| 35 | 917 | 2.31 | 27.60 |
| 36 | 1,111 | 2.80 | 30.40 |
| 37 | 1,213 | 3.06 | 33.46 |
| 38 | 1,345 | 3.39 | 36.86 |
| 39 | 1,466 | 3.70 | 40.55 |
| 40 | 1,612 | 4.07 | 44.62 |
| 41 | 1,858 | 4.69 | 49.30 |
| 42 | 2,017 | 5.09 | 54.39 |
| 43 | 2,193 | 5.53 | 59.92 |
| 44 | 2,341 | 5.90 | 65.83 |
| 45 | 2,509 | 6.33 | 72.15 |
| 46 | 2,496 | 6.29 | 78.45 |
| 47 | 2,405 | 6.07 | 84.51 |
| 48 | 2,296 | 5.79 | 90.30 |
| 49 | 1,759 | 4.44 | 94.74 |
| 50 | 1,205 | 3.04 | 97.78 |
| 51 | 677 | 1.71 | 99.49 |
| 52 | 204 | 0.51 | 100.00 |

Table 7.A.14 Raw Score Frequency Distribution—Written Language, Kindergarten

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 0 | 2,561 | 1.86 | 1.86 |
| 1 | 1,395 | 1.01 | 2.87 |
| 2 | 1,520 | 1.10 | 3.98 |
| 3 | 1,502 | 1.09 | 5.07 |
| 4 | 1,727 | 1.25 | 6.32 |
| 5 | 1,955 | 1.42 | 7.74 |
| 6 | 2,331 | 1.69 | 9.43 |
| 7 | 2,659 | 1.93 | 11.36 |
| 8 | 2,914 | 2.12 | 13.48 |
| 9 | 3,086 | 2.24 | 15.72 |
| 10 | 3,364 | 2.44 | 18.16 |
| 11 | 3,502 | 2.54 | 20.71 |
| 12 | 3,791 | 2.75 | 23.46 |
| 13 | 3,776 | 2.74 | 26.20 |
| 14 | 3,951 | 2.87 | 29.07 |
| 15 | 4,065 | 2.95 | 32.02 |
| 16 | 3,995 | 2.90 | 34.92 |
| 17 | 4,226 | 3.07 | 37.99 |
| 18 | 4,265 | 3.10 | 41.09 |
| 19 | 4,467 | 3.24 | 44.33 |
| 20 | 4,748 | 3.45 | 47.78 |
| 21 | 5,083 | 3.69 | 51.47 |
| 22 | 5,114 | 3.71 | 55.18 |
| 23 | 5,658 | 4.11 | 59.29 |
| 24 | 6,122 | 4.45 | 63.73 |
| 25 | 6,835 | 4.96 | 68.70 |
| 26 | 8,001 | 5.81 | 74.51 |
| 27 | 9,459 | 6.87 | 81.37 |
| 28 | 11,399 | 8.28 | 89.65 |
| 29 | 14,253 | 10.35 | 100.00 |

Table 7.A.15 Raw Score Frequency Distribution—Written Language, Grade One

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 0 | 1,986 | 1.99 | 1.99 |
| 1 | 2,207 | 2.21 | 4.20 |
| 2 | 2,373 | 2.37 | 6.57 |
| 3 | 2,437 | 2.44 | 9.01 |
| 4 | 2,303 | 2.30 | 11.31 |
| 5 | 2,280 | 2.28 | 13.59 |
| 6 | 2,222 | 2.22 | 15.82 |
| 7 | 2,202 | 2.20 | 18.02 |
| 8 | 2,139 | 2.14 | 20.16 |
| 9 | 2,332 | 2.33 | 22.49 |
| 10 | 2,254 | 2.26 | 24.75 |
| 11 | 2,316 | 2.32 | 27.07 |
| 12 | 2,512 | 2.51 | 29.58 |
| 13 | 2,411 | 2.41 | 31.99 |
| 14 | 2,540 | 2.54 | 34.53 |
| 15 | 2,456 | 2.46 | 36.99 |
| 16 | 2,463 | 2.46 | 39.45 |
| 17 | 2,616 | 2.62 | 42.07 |
| 18 | 2,486 | 2.49 | 44.56 |
| 19 | 2,572 | 2.57 | 47.13 |
| 20 | 2,477 | 2.48 | 49.61 |
| 21 | 2,394 | 2.40 | 52.01 |
| 22 | 2,427 | 2.43 | 54.43 |
| 23 | 2,506 | 2.51 | 56.94 |
| 24 | 2,576 | 2.58 | 59.52 |
| 25 | 2,522 | 2.52 | 62.04 |
| 26 | 2,524 | 2.53 | 64.57 |
| 27 | 2,644 | 2.65 | 67.21 |
| 28 | 2,621 | 2.62 | 69.84 |
| 29 | 2,707 | 2.71 | 72.54 |
| 30 | 2,918 | 2.92 | 75.46 |
| 31 | 3,046 | 3.05 | 78.51 |
| 32 | 3,258 | 3.26 | 81.77 |
| 33 | 3,405 | 3.41 | 85.18 |
| 34 | 3,447 | 3.45 | 88.63 |
| 35 | 3,413 | 3.41 | 92.04 |
| 36 | 3,203 | 3.20 | 95.25 |
| 37 | 2,806 | 2.81 | 98.05 |
| 38 | 1,946 | 1.95 | 100.00 |

Table 7.A.16 Raw Score Frequency Distribution—Written Language, Grade Two

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 0 | 800 | 0.84 | 0.84 |
| 1 | 888 | 0.93 | 1.76 |
| 2 | 1,066 | 1.11 | 2.88 |
| 3 | 1,010 | 1.06 | 3.93 |
| 4 | 942 | 0.98 | 4.92 |
| 5 | 835 | 0.87 | 5.79 |
| 6 | 940 | 0.98 | 6.77 |
| 7 | 953 | 1.00 | 7.77 |
| 8 | 1,058 | 1.11 | 8.88 |
| 9 | 1,235 | 1.29 | 10.17 |
| 10 | 1,314 | 1.37 | 11.54 |
| 11 | 1,469 | 1.54 | 13.08 |
| 12 | 1,543 | 1.61 | 14.69 |
| 13 | 1,509 | 1.58 | 16.27 |
| 14 | 1,594 | 1.67 | 17.93 |
| 15 | 1,589 | 1.66 | 19.59 |
| 16 | 1,603 | 1.68 | 21.27 |
| 17 | 1,646 | 1.72 | 22.99 |
| 18 | 1,684 | 1.76 | 24.75 |
| 19 | 1,658 | 1.73 | 26.48 |
| 20 | 1,718 | 1.80 | 28.28 |
| 21 | 1,887 | 1.97 | 30.25 |
| 22 | 1,907 | 1.99 | 32.25 |
| 23 | 1,980 | 2.07 | 34.31 |
| 24 | 1,918 | 2.00 | 36.32 |
| 25 | 2,081 | 2.18 | 38.49 |
| 26 | 2,178 | 2.28 | 40.77 |
| 27 | 2,265 | 2.37 | 43.14 |
| 28 | 2,411 | 2.52 | 45.66 |
| 29 | 2,572 | 2.69 | 48.35 |
| 30 | 2,749 | 2.87 | 51.22 |
| 31 | 2,965 | 3.10 | 54.32 |
| 32 | 3,183 | 3.33 | 57.65 |
| 33 | 3,543 | 3.70 | 61.35 |
| 34 | 3,825 | 4.00 | 65.35 |
| 35 | 4,121 | 4.31 | 69.66 |
| 36 | 4,369 | 4.57 | 74.22 |
| 37 | 4,578 | 4.79 | 79.01 |
| 38 | 4,498 | 4.70 | 83.71 |
| 39 | 4,572 | 4.78 | 88.49 |
| 40 | 4,247 | 4.44 | 92.93 |
| 41 | 3,466 | 3.62 | 96.55 |
| 42 | 2,286 | 2.39 | 98.94 |
| 43 | 1,012 | 1.06 | 100.00 |

Table 7.A.17 Raw Score Frequency Distribution—Written Language, Grade Three

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 0 | 11 | 0.01 | 0.01 |
| 1 | 46 | 0.05 | 0.06 |
| 2 | 126 | 0.13 | 0.19 |
| 3 | 308 | 0.31 | 0.50 |
| 4 | 709 | 0.72 | 1.23 |
| 5 | 1,231 | 1.26 | 2.48 |
| 6 | 1,839 | 1.88 | 4.36 |
| 7 | 2,403 | 2.45 | 6.82 |
| 8 | 2,920 | 2.98 | 9.80 |
| 9 | 3,361 | 3.43 | 13.23 |
| 10 | 3,694 | 3.77 | 17.00 |
| 11 | 3,971 | 4.06 | 21.06 |
| 12 | 4,222 | 4.31 | 25.37 |
| 13 | 4,256 | 4.35 | 29.72 |
| 14 | 4,176 | 4.27 | 33.98 |
| 15 | 4,144 | 4.23 | 38.22 |
| 16 | 4,058 | 4.14 | 42.36 |
| 17 | 4,148 | 4.24 | 46.60 |
| 18 | 3,949 | 4.03 | 50.63 |
| 19 | 3,998 | 4.08 | 54.71 |
| 20 | 3,834 | 3.92 | 58.63 |
| 21 | 3,746 | 3.83 | 62.46 |
| 22 | 3,705 | 3.78 | 66.24 |
| 23 | 3,621 | 3.70 | 69.94 |
| 24 | 3,539 | 3.61 | 73.55 |
| 25 | 3,483 | 3.56 | 77.11 |
| 26 | 3,309 | 3.38 | 80.49 |
| 27 | 3,182 | 3.25 | 83.74 |
| 28 | 2,928 | 2.99 | 86.73 |
| 29 | 2,559 | 2.61 | 89.35 |
| 30 | 2,273 | 2.32 | 91.67 |
| 31 | 1,913 | 1.95 | 93.62 |
| 32 | 1,660 | 1.70 | 95.32 |
| 33 | 1,376 | 1.41 | 96.72 |
| 34 | 1,006 | 1.03 | 97.75 |
| 35 | 812 | 0.83 | 98.58 |
| 36 | 548 | 0.56 | 99.14 |
| 37 | 401 | 0.41 | 99.55 |
| 38 | 237 | 0.24 | 99.79 |
| 39 | 133 | 0.14 | 99.93 |
| 40 | 51 | 0.05 | 99.98 |
| 41 | 13 | 0.01 | 99.99 |
| 42 | 8 | 0.01 | 100.00 |
| 43 | 1 | 0.00 | 100.00 |

Table 7.A.18 Raw Score Frequency Distribution—Written Language, Grade Four

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 0 | 4 | 0.00 | 0.00 |
| 1 | 25 | 0.03 | 0.03 |
| 2 | 83 | 0.09 | 0.12 |
| 3 | 183 | 0.19 | 0.31 |
| 4 | 358 | 0.38 | 0.69 |
| 5 | 659 | 0.70 | 1.39 |
| 6 | 970 | 1.03 | 2.42 |
| 7 | 1,257 | 1.33 | 3.76 |
| 8 | 1,529 | 1.62 | 5.38 |
| 9 | 1,816 | 1.93 | 7.30 |
| 10 | 1,975 | 2.10 | 9.40 |
| 11 | 2,205 | 2.34 | 11.74 |
| 12 | 2,318 | 2.46 | 14.20 |
| 13 | 2,573 | 2.73 | 16.93 |
| 14 | 2,636 | 2.80 | 19.73 |
| 15 | 2,717 | 2.88 | 22.61 |
| 16 | 2,846 | 3.02 | 25.63 |
| 17 | 2,941 | 3.12 | 28.75 |
| 18 | 3,055 | 3.24 | 31.99 |
| 19 | 3,132 | 3.32 | 35.32 |
| 20 | 3,144 | 3.34 | 38.65 |
| 21 | 3,285 | 3.49 | 42.14 |
| 22 | 3,534 | 3.75 | 45.89 |
| 23 | 3,451 | 3.66 | 49.55 |
| 24 | 3,679 | 3.90 | 53.45 |
| 25 | 3,918 | 4.16 | 57.61 |
| 26 | 3,910 | 4.15 | 61.76 |
| 27 | 3,945 | 4.19 | 65.95 |
| 28 | 4,119 | 4.37 | 70.32 |
| 29 | 3,967 | 4.21 | 74.53 |
| 30 | 4,023 | 4.27 | 78.80 |
| 31 | 3,905 | 4.14 | 82.94 |
| 32 | 3,612 | 3.83 | 86.77 |
| 33 | 3,140 | 3.33 | 90.10 |
| 34 | 2,784 | 2.95 | 93.06 |
| 35 | 2,237 | 2.37 | 95.43 |
| 36 | 1,677 | 1.78 | 97.21 |
| 37 | 1,154 | 1.22 | 98.44 |
| 38 | 748 | 0.79 | 99.23 |
| 39 | 414 | 0.44 | 99.67 |
| 40 | 190 | 0.20 | 99.87 |
| 41 | 96 | 0.10 | 99.97 |
| 42 | 22 | 0.02 | 100.00 |
| 43 | 3 | 0.00 | 100.00 |

Table 7.A.19 Raw Score Frequency Distribution—Written Language, Grade Five

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 0 | 7 | 0.01 | 0.01 |
| 1 | 7 | 0.01 | 0.02 |
| 2 | 42 | 0.05 | 0.06 |
| 3 | 106 | 0.12 | 0.18 |
| 4 | 224 | 0.25 | 0.43 |
| 5 | 430 | 0.48 | 0.91 |
| 6 | 579 | 0.65 | 1.56 |
| 7 | 794 | 0.89 | 2.45 |
| 8 | 916 | 1.02 | 3.47 |
| 9 | 1,037 | 1.16 | 4.63 |
| 10 | 1,226 | 1.37 | 6.01 |
| 11 | 1,291 | 1.44 | 7.45 |
| 12 | 1,407 | 1.57 | 9.02 |
| 13 | 1,474 | 1.65 | 10.67 |
| 14 | 1,524 | 1.71 | 12.38 |
| 15 | 1,733 | 1.94 | 14.32 |
| 16 | 1,824 | 2.04 | 16.36 |
| 17 | 1,961 | 2.19 | 18.55 |
| 18 | 2,059 | 2.30 | 20.86 |
| 19 | 2,148 | 2.40 | 23.26 |
| 20 | 2,271 | 2.54 | 25.80 |
| 21 | 2,485 | 2.78 | 28.58 |
| 22 | 2,559 | 2.86 | 31.44 |
| 23 | 2,806 | 3.14 | 34.58 |
| 24 | 3,031 | 3.39 | 37.98 |
| 25 | 3,327 | 3.72 | 41.70 |
| 26 | 3,572 | 4.00 | 45.69 |
| 27 | 3,830 | 4.29 | 49.98 |
| 28 | 4,104 | 4.59 | 54.57 |
| 29 | 4,323 | 4.84 | 59.41 |
| 30 | 4,659 | 5.21 | 64.62 |
| 31 | 4,725 | 5.29 | 69.91 |
| 32 | 4,809 | 5.38 | 75.29 |
| 33 | 4,473 | 5.00 | 80.29 |
| 34 | 4,265 | 4.77 | 85.07 |
| 35 | 3,865 | 4.32 | 89.39 |
| 36 | 3,217 | 3.60 | 92.99 |
| 37 | 2,507 | 2.81 | 95.79 |
| 38 | 1,776 | 1.99 | 97.78 |
| 39 | 1,104 | 1.24 | 99.02 |
| 40 | 558 | 0.62 | 99.64 |
| 41 | 243 | 0.27 | 99.91 |
| 42 | 62 | 0.07 | 99.98 |
| 43 | 16 | 0.02 | 100.00 |

Table 7.A.20 Raw Score Frequency Distribution—Written Language, Grade Six

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 0 | 3 | 0.00 | 0.00 |
| 1 | 14 | 0.02 | 0.02 |
| 2 | 41 | 0.05 | 0.08 |
| 3 | 106 | 0.14 | 0.22 |
| 4 | 230 | 0.30 | 0.52 |
| 5 | 402 | 0.53 | 1.05 |
| 6 | 657 | 0.87 | 1.91 |
| 7 | 846 | 1.11 | 3.03 |
| 8 | 1,018 | 1.34 | 4.37 |
| 9 | 1,118 | 1.47 | 5.84 |
| 10 | 1,171 | 1.54 | 7.39 |
| 11 | 1,325 | 1.75 | 9.13 |
| 12 | 1,475 | 1.94 | 11.08 |
| 13 | 1,625 | 2.14 | 13.22 |
| 14 | 1,706 | 2.25 | 15.47 |
| 15 | 1,895 | 2.50 | 17.97 |
| 16 | 2,025 | 2.67 | 20.63 |
| 17 | 2,294 | 3.02 | 23.66 |
| 18 | 2,466 | 3.25 | 26.91 |
| 19 | 2,597 | 3.42 | 30.33 |
| 20 | 2,703 | 3.56 | 33.89 |
| 21 | 2,911 | 3.84 | 37.73 |
| 22 | 3,103 | 4.09 | 41.82 |
| 23 | 3,165 | 4.17 | 45.99 |
| 24 | 3,260 | 4.30 | 50.29 |
| 25 | 3,402 | 4.48 | 54.77 |
| 26 | 3,574 | 4.71 | 59.48 |
| 27 | 3,461 | 4.56 | 64.04 |
| 28 | 3,480 | 4.59 | 68.63 |
| 29 | 3,483 | 4.59 | 73.22 |
| 30 | 3,304 | 4.35 | 77.57 |
| 31 | 3,173 | 4.18 | 81.75 |
| 32 | 2,918 | 3.85 | 85.60 |
| 33 | 2,640 | 3.48 | 89.08 |
| 34 | 2,263 | 2.98 | 92.06 |
| 35 | 1,904 | 2.51 | 94.57 |
| 36 | 1,520 | 2.00 | 96.57 |
| 37 | 1,098 | 1.45 | 98.02 |
| 38 | 730 | 0.96 | 98.98 |
| 39 | 419 | 0.55 | 99.53 |
| 40 | 212 | 0.28 | 99.81 |
| 41 | 103 | 0.14 | 99.95 |
| 42 | 29 | 0.04 | 99.99 |
| 43 | 9 | 0.01 | 100.00 |

Table 7.A.21 Raw Score Frequency Distribution—Written Language, Grade Seven

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 0 | 2 | 0.00 | 0.00 |
| 1 | 2 | 0.00 | 0.01 |
| 2 | 25 | 0.04 | 0.04 |
| 3 | 86 | 0.13 | 0.17 |
| 4 | 163 | 0.25 | 0.42 |
| 5 | 366 | 0.55 | 0.97 |
| 6 | 482 | 0.73 | 1.70 |
| 7 | 669 | 1.01 | 2.71 |
| 8 | 779 | 1.18 | 3.88 |
| 9 | 928 | 1.40 | 5.28 |
| 10 | 991 | 1.50 | 6.78 |
| 11 | 1,032 | 1.56 | 8.34 |
| 12 | 1,101 | 1.66 | 10.00 |
| 13 | 1,251 | 1.89 | 11.89 |
| 14 | 1,344 | 2.03 | 13.91 |
| 15 | 1,452 | 2.19 | 16.11 |
| 16 | 1,469 | 2.22 | 18.32 |
| 17 | 1,679 | 2.53 | 20.86 |
| 18 | 1,770 | 2.67 | 23.53 |
| 19 | 1,892 | 2.85 | 26.38 |
| 20 | 2,030 | 3.06 | 29.44 |
| 21 | 2,182 | 3.29 | 32.74 |
| 22 | 2,226 | 3.36 | 36.10 |
| 23 | 2,327 | 3.51 | 39.61 |
| 24 | 2,424 | 3.66 | 43.26 |
| 25 | 2,612 | 3.94 | 47.21 |
| 26 | 2,678 | 4.04 | 51.25 |
| 27 | 2,779 | 4.19 | 55.44 |
| 28 | 2,837 | 4.28 | 59.72 |
| 29 | 2,926 | 4.42 | 64.14 |
| 30 | 3,022 | 4.56 | 68.70 |
| 31 | 2,969 | 4.48 | 73.18 |
| 32 | 3,007 | 4.54 | 77.71 |
| 33 | 2,864 | 4.32 | 82.04 |
| 34 | 2,792 | 4.21 | 86.25 |
| 35 | 2,522 | 3.81 | 90.05 |
| 36 | 2,114 | 3.19 | 93.24 |
| 37 | 1,700 | 2.57 | 95.81 |
| 38 | 1,221 | 1.84 | 97.65 |
| 39 | 834 | 1.26 | 98.91 |
| 40 | 458 | 0.69 | 99.60 |
| 41 | 186 | 0.28 | 99.88 |
| 42 | 67 | 0.10 | 99.98 |
| 43 | 11 | 0.02 | 100.00 |

Table 7.A.22 Raw Score Frequency Distribution—Written Language, Grade Eight

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 0 | 0 | 0.00 | 0.00 |
| 1 | 6 | 0.01 | 0.01 |
| 2 | 25 | 0.04 | 0.05 |
| 3 | 66 | 0.11 | 0.16 |
| 4 | 146 | 0.24 | 0.40 |
| 5 | 270 | 0.45 | 0.85 |
| 6 | 405 | 0.67 | 1.52 |
| 7 | 470 | 0.78 | 2.29 |
| 8 | 625 | 1.03 | 3.33 |
| 9 | 699 | 1.16 | 4.48 |
| 10 | 784 | 1.30 | 5.78 |
| 11 | 851 | 1.41 | 7.19 |
| 12 | 942 | 1.56 | 8.74 |
| 13 | 914 | 1.51 | 10.25 |
| 14 | 1,038 | 1.72 | 11.97 |
| 15 | 1,134 | 1.87 | 13.84 |
| 16 | 1,206 | 1.99 | 15.84 |
| 17 | 1,306 | 2.16 | 18.00 |
| 18 | 1,312 | 2.17 | 20.16 |
| 19 | 1,446 | 2.39 | 22.55 |
| 20 | 1,568 | 2.59 | 25.15 |
| 21 | 1,626 | 2.69 | 27.83 |
| 22 | 1,681 | 2.78 | 30.61 |
| 23 | 1,788 | 2.96 | 33.57 |
| 24 | 1,923 | 3.18 | 36.75 |
| 25 | 2,006 | 3.32 | 40.06 |
| 26 | 2,161 | 3.57 | 43.63 |
| 27 | 2,271 | 3.75 | 47.39 |
| 28 | 2,366 | 3.91 | 51.30 |
| 29 | 2,499 | 4.13 | 55.43 |
| 30 | 2,656 | 4.39 | 59.82 |
| 31 | 2,822 | 4.66 | 64.48 |
| 32 | 3,013 | 4.98 | 69.47 |
| 33 | 3,110 | 5.14 | 74.61 |
| 34 | 3,107 | 5.14 | 79.74 |
| 35 | 2,881 | 4.76 | 84.50 |
| 36 | 2,726 | 4.51 | 89.01 |
| 37 | 2,305 | 3.81 | 92.82 |
| 38 | 1,762 | 2.91 | 95.73 |
| 39 | 1,276 | 2.11 | 97.84 |
| 40 | 786 | 1.30 | 99.14 |
| 41 | 355 | 0.59 | 99.73 |
| 42 | 139 | 0.23 | 99.96 |
| 43 | 26 | 0.04 | 100.00 |

Table 7.A.23 Raw Score Frequency Distribution—Written Language, Grade Nine

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 0 | 0 | 0.00 | 0.00 |
| 1 | 5 | 0.01 | 0.01 |
| 2 | 24 | 0.04 | 0.05 |
| 3 | 117 | 0.19 | 0.24 |
| 4 | 246 | 0.41 | 0.65 |
| 5 | 434 | 0.72 | 1.37 |
| 6 | 647 | 1.08 | 2.45 |
| 7 | 844 | 1.40 | 3.85 |
| 8 | 969 | 1.61 | 5.46 |
| 9 | 1,114 | 1.85 | 7.32 |
| 10 | 1,157 | 1.92 | 9.24 |
| 11 | 1,150 | 1.91 | 11.15 |
| 12 | 1,340 | 2.23 | 13.38 |
| 13 | 1,298 | 2.16 | 15.54 |
| 14 | 1,246 | 2.07 | 17.61 |
| 15 | 1,360 | 2.26 | 19.88 |
| 16 | 1,472 | 2.45 | 22.32 |
| 17 | 1,518 | 2.52 | 24.85 |
| 18 | 1,592 | 2.65 | 27.50 |
| 19 | 1,762 | 2.93 | 30.43 |
| 20 | 1,802 | 3.00 | 33.42 |
| 21 | 1,938 | 3.22 | 36.65 |
| 22 | 2,018 | 3.36 | 40.00 |
| 23 | 2,120 | 3.53 | 43.53 |
| 24 | 2,218 | 3.69 | 47.22 |
| 25 | 2,366 | 3.93 | 51.15 |
| 26 | 2,473 | 4.11 | 55.26 |
| 27 | 2,523 | 4.20 | 59.46 |
| 28 | 2,738 | 4.55 | 64.01 |
| 29 | 2,739 | 4.56 | 68.57 |
| 30 | 2,713 | 4.51 | 73.08 |
| 31 | 2,742 | 4.56 | 77.64 |
| 32 | 2,718 | 4.52 | 82.16 |
| 33 | 2,436 | 4.05 | 86.21 |
| 34 | 2,233 | 3.71 | 89.93 |
| 35 | 1,834 | 3.05 | 92.98 |
| 36 | 1,513 | 2.52 | 95.49 |
| 37 | 1,090 | 1.81 | 97.31 |
| 38 | 735 | 1.22 | 98.53 |
| 39 | 493 | 0.82 | 99.35 |
| 40 | 241 | 0.40 | 99.75 |
| 41 | 113 | 0.19 | 99.94 |
| 42 | 31 | 0.05 | 99.99 |
| 43 | 7 | 0.01 | 100.00 |

Table 7.A.24 Raw Score Frequency Distribution—Written Language, Grade Ten

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 0 | 1 | 0.00 | 0.00 |
| 1 | 5 | 0.01 | 0.01 |
| 2 | 20 | 0.03 | 0.05 |
| 3 | 65 | 0.11 | 0.16 |
| 4 | 164 | 0.29 | 0.44 |
| 5 | 257 | 0.45 | 0.89 |
| 6 | 446 | 0.78 | 1.67 |
| 7 | 626 | 1.09 | 2.76 |
| 8 | 762 | 1.33 | 4.09 |
| 9 | 874 | 1.52 | 5.62 |
| 10 | 912 | 1.59 | 7.21 |
| 11 | 1,000 | 1.74 | 8.95 |
| 12 | 1,093 | 1.91 | 10.86 |
| 13 | 1,090 | 1.90 | 12.76 |
| 14 | 1,138 | 1.98 | 14.74 |
| 15 | 1,209 | 2.11 | 16.85 |
| 16 | 1,281 | 2.23 | 19.09 |
| 17 | 1,371 | 2.39 | 21.48 |
| 18 | 1,425 | 2.49 | 23.96 |
| 19 | 1,459 | 2.54 | 26.51 |
| 20 | 1,464 | 2.55 | 29.06 |
| 21 | 1,647 | 2.87 | 31.94 |
| 22 | 1,749 | 3.05 | 34.99 |
| 23 | 1,767 | 3.08 | 38.07 |
| 24 | 1,852 | 3.23 | 41.30 |
| 25 | 2,027 | 3.54 | 44.84 |
| 26 | 2,109 | 3.68 | 48.51 |
| 27 | 2,294 | 4.00 | 52.52 |
| 28 | 2,472 | 4.31 | 56.83 |
| 29 | 2,453 | 4.28 | 61.11 |
| 30 | 2,642 | 4.61 | 65.71 |
| 31 | 2,762 | 4.82 | 70.53 |
| 32 | 2,825 | 4.93 | 75.46 |
| 33 | 2,729 | 4.76 | 80.22 |
| 34 | 2,689 | 4.69 | 84.91 |
| 35 | 2,381 | 4.15 | 89.06 |
| 36 | 2,069 | 3.61 | 92.67 |
| 37 | 1,607 | 2.80 | 95.48 |
| 38 | 1,144 | 2.00 | 97.47 |
| 39 | 827 | 1.44 | 98.91 |
| 40 | 388 | 0.68 | 99.59 |
| 41 | 161 | 0.28 | 99.87 |
| 42 | 63 | 0.11 | 99.98 |
| 43 | 11 | 0.02 | 100.00 |

Table 7.A.25 Raw Score Frequency Distribution—Written Language, Grade Eleven

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 0 | 2 | 0.00 | 0.00 |
| 1 | 2 | 0.00 | 0.01 |
| 2 | 13 | 0.03 | 0.03 |
| 3 | 62 | 0.13 | 0.16 |
| 4 | 136 | 0.27 | 0.43 |
| 5 | 245 | 0.50 | 0.93 |
| 6 | 431 | 0.87 | 1.80 |
| 7 | 495 | 1.00 | 2.80 |
| 8 | 618 | 1.25 | 4.05 |
| 9 | 704 | 1.42 | 5.48 |
| 10 | 805 | 1.63 | 7.10 |
| 11 | 788 | 1.59 | 8.70 |
| 12 | 805 | 1.63 | 10.32 |
| 13 | 821 | 1.66 | 11.98 |
| 14 | 846 | 1.71 | 13.69 |
| 15 | 1,000 | 2.02 | 15.72 |
| 16 | 1,036 | 2.09 | 17.81 |
| 17 | 1,122 | 2.27 | 20.08 |
| 18 | 1,241 | 2.51 | 22.59 |
| 19 | 1,388 | 2.81 | 25.39 |
| 20 | 1,468 | 2.97 | 28.36 |
| 21 | 1,605 | 3.25 | 31.61 |
| 22 | 1,668 | 3.37 | 34.98 |
| 23 | 1,878 | 3.80 | 38.78 |
| 24 | 1,957 | 3.96 | 42.73 |
| 25 | 2,134 | 4.31 | 47.05 |
| 26 | 2,214 | 4.48 | 51.52 |
| 27 | 2,367 | 4.79 | 56.31 |
| 28 | 2,430 | 4.91 | 61.22 |
| 29 | 2,509 | 5.07 | 66.30 |
| 30 | 2,455 | 4.96 | 71.26 |
| 31 | 2,498 | 5.05 | 76.31 |
| 32 | 2,461 | 4.98 | 81.29 |
| 33 | 2,223 | 4.49 | 85.78 |
| 34 | 1,859 | 3.76 | 89.54 |
| 35 | 1,653 | 3.34 | 92.88 |
| 36 | 1,249 | 2.53 | 95.41 |
| 37 | 965 | 1.95 | 97.36 |
| 38 | 604 | 1.22 | 98.58 |
| 39 | 394 | 0.80 | 99.38 |
| 40 | 195 | 0.39 | 99.77 |
| 41 | 77 | 0.16 | 99.93 |
| 42 | 35 | 0.07 | 100.00 |
| 43 | 2 | 0.00 | 100.00 |

Table 7.A.26 Raw Score Frequency Distribution—Written Language, Grade Twelve

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 0 | 2 | 0.01 | 0.01 |
| 1 | 4 | 0.01 | 0.02 |
| 2 | 13 | 0.03 | 0.05 |
| 3 | 55 | 0.14 | 0.19 |
| 4 | 119 | 0.30 | 0.49 |
| 5 | 209 | 0.53 | 1.01 |
| 6 | 356 | 0.90 | 1.91 |
| 7 | 445 | 1.12 | 3.03 |
| 8 | 521 | 1.31 | 4.35 |
| 9 | 589 | 1.49 | 5.83 |
| 10 | 624 | 1.57 | 7.41 |
| 11 | 665 | 1.68 | 9.08 |
| 12 | 741 | 1.87 | 10.95 |
| 13 | 777 | 1.96 | 12.91 |
| 14 | 796 | 2.01 | 14.92 |
| 15 | 887 | 2.24 | 17.16 |
| 16 | 953 | 2.40 | 19.56 |
| 17 | 962 | 2.43 | 21.99 |
| 18 | 1,139 | 2.87 | 24.86 |
| 19 | 1,138 | 2.87 | 27.73 |
| 20 | 1,231 | 3.10 | 30.83 |
| 21 | 1,300 | 3.28 | 34.11 |
| 22 | 1,388 | 3.50 | 37.61 |
| 23 | 1,512 | 3.81 | 41.43 |
| 24 | 1,543 | 3.89 | 45.32 |
| 25 | 1,630 | 4.11 | 49.43 |
| 26 | 1,761 | 4.44 | 53.87 |
| 27 | 1,820 | 4.59 | 58.46 |
| 28 | 1,816 | 4.58 | 63.04 |
| 29 | 1,928 | 4.86 | 67.90 |
| 30 | 1,968 | 4.96 | 72.86 |
| 31 | 1,892 | 4.77 | 77.64 |
| 32 | 1,748 | 4.41 | 82.04 |
| 33 | 1,659 | 4.18 | 86.23 |
| 34 | 1,475 | 3.72 | 89.95 |
| 35 | 1,236 | 3.12 | 93.06 |
| 36 | 981 | 2.47 | 95.54 |
| 37 | 734 | 1.85 | 97.39 |
| 38 | 517 | 1.30 | 98.69 |
| 39 | 278 | 0.70 | 99.39 |
| 40 | 145 | 0.37 | 99.76 |
| 41 | 68 | 0.17 | 99.93 |
| 42 | 23 | 0.06 | 99.99 |
| 43 | 4 | 0.01 | 100.00 |

Table 7.A.27 Raw Score Frequency Distribution—Overall Score, Kindergarten

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 0 | 1,621 | 1.18 | 1.18 |
| 1 | 690 | 0.50 | 1.68 |
| 2 | 707 | 0.51 | 2.19 |
| 3 | 608 | 0.44 | 2.63 |
| 4 | 629 | 0.46 | 3.09 |
| 5 | 650 | 0.47 | 3.56 |
| 6 | 646 | 0.47 | 4.03 |
| 7 | 681 | 0.49 | 4.52 |
| 8 | 756 | 0.55 | 5.07 |
| 9 | 726 | 0.53 | 5.60 |
| 10 | 779 | 0.57 | 6.17 |
| 11 | 709 | 0.51 | 6.68 |
| 12 | 806 | 0.59 | 7.27 |
| 13 | 856 | 0.62 | 7.89 |
| 14 | 878 | 0.64 | 8.53 |
| 15 | 868 | 0.63 | 9.16 |
| 16 | 940 | 0.68 | 9.84 |
| 17 | 996 | 0.72 | 10.56 |
| 18 | 1,027 | 0.75 | 11.31 |
| 19 | 1,010 | 0.73 | 12.04 |
| 20 | 1,050 | 0.76 | 12.80 |
| 21 | 1,115 | 0.81 | 13.61 |
| 22 | 1,181 | 0.86 | 14.47 |
| 23 | 1,274 | 0.93 | 15.40 |
| 24 | 1,254 | 0.91 | 16.31 |
| 25 | 1,222 | 0.89 | 17.19 |
| 26 | 1,320 | 0.96 | 18.15 |
| 27 | 1,424 | 1.03 | 19.19 |
| 28 | 1,489 | 1.08 | 20.27 |
| 29 | 1,554 | 1.13 | 21.39 |
| 30 | 1,605 | 1.17 | 22.56 |
| 31 | 1,707 | 1.24 | 23.80 |
| 32 | 1,764 | 1.28 | 25.08 |
| 33 | 1,802 | 1.31 | 26.39 |
| 34 | 1,940 | 1.41 | 27.80 |
| 35 | 1,929 | 1.40 | 29.20 |
| 36 | 1,930 | 1.40 | 30.60 |
| 37 | 2,140 | 1.55 | 32.15 |
| 38 | 2,066 | 1.50 | 33.65 |
| 39 | 2,207 | 1.60 | 35.26 |
| 40 | 2,239 | 1.63 | 36.88 |
| 41 | 2,301 | 1.67 | 38.55 |
| 42 | 2,342 | 1.70 | 40.25 |
| 43 | 2,457 | 1.78 | 42.04 |
| 44 | 2,552 | 1.85 | 43.89 |
| 45 | 2,534 | 1.84 | 45.73 |
| 46 | 2,665 | 1.94 | 47.66 |
| 47 | 2,756 | 2.00 | 49.67 |
| 48 | 2,823 | 2.05 | 51.72 |
| 49 | 2,916 | 2.12 | 53.83 |
| 50 | 2,931 | 2.13 | 55.96 |
| 51 | 2,912 | 2.11 | 58.08 |
| 52 | 3,084 | 2.24 | 60.31 |
| 53 | 3,193 | 2.32 | 62.63 |
| 54 | 3,150 | 2.29 | 64.92 |
| 55 | 3,209 | 2.33 | 67.25 |
| 56 | 3,246 | 2.36 | 69.61 |
| 57 | 3,291 | 2.39 | 72.00 |
| 58 | 3,429 | 2.49 | 74.49 |
| 59 | 3,579 | 2.60 | 77.09 |
| 60 | 3,428 | 2.49 | 79.57 |
| 61 | 3,503 | 2.54 | 82.12 |
| 62 | 3,499 | 2.54 | 84.66 |
| 63 | 3,350 | 2.43 | 87.09 |
| 64 | 3,239 | 2.35 | 89.44 |
| 65 | 3,163 | 2.30 | 91.74 |
| 66 | 2,875 | 2.09 | 93.83 |
| 67 | 2,627 | 1.91 | 95.73 |
| 68 | 2,218 | 1.61 | 97.34 |
| 69 | 1,736 | 1.26 | 98.61 |
| 70 | 1,285 | 0.93 | 99.54 |
| 71 | 636 | 0.46 | 100.00 |

Table 7.A.28 Raw Score Frequency Distribution—Overall Score, Grade One

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 0 | 843 | 0.84 | 0.84 |
| 1 | 353 | 0.35 | 1.20 |
| 2 | 341 | 0.34 | 1.54 |
| 3 | 303 | 0.30 | 1.84 |
| 4 | 293 | 0.29 | 2.13 |
| 5 | 240 | 0.24 | 2.37 |
| 6 | 241 | 0.24 | 2.62 |
| 7 | 251 | 0.25 | 2.87 |
| 8 | 255 | 0.26 | 3.12 |
| 9 | 290 | 0.29 | 3.41 |
| 10 | 293 | 0.29 | 3.70 |
| 11 | 313 | 0.31 | 4.02 |
| 12 | 333 | 0.33 | 4.35 |
| 13 | 361 | 0.36 | 4.71 |
| 14 | 411 | 0.41 | 5.12 |
| 15 | 414 | 0.41 | 5.54 |
| 16 | 403 | 0.40 | 5.94 |
| 17 | 427 | 0.43 | 6.37 |
| 18 | 425 | 0.43 | 6.79 |
| 19 | 441 | 0.44 | 7.23 |
| 20 | 500 | 0.50 | 7.74 |
| 21 | 541 | 0.54 | 8.28 |
| 22 | 539 | 0.54 | 8.82 |
| 23 | 585 | 0.59 | 9.40 |
| 24 | 611 | 0.61 | 10.01 |
| 25 | 615 | 0.62 | 10.63 |
| 26 | 696 | 0.70 | 11.32 |
| 27 | 697 | 0.70 | 12.02 |
| 28 | 784 | 0.78 | 12.81 |
| 29 | 902 | 0.90 | 13.71 |
| 30 | 944 | 0.94 | 14.65 |
| 31 | 915 | 0.92 | 15.57 |
| 32 | 1,105 | 1.11 | 16.67 |
| 33 | 1,139 | 1.14 | 17.81 |
| 34 | 1,234 | 1.23 | 19.05 |
| 35 | 1,269 | 1.27 | 20.32 |
| 36 | 1,326 | 1.33 | 21.64 |
| 37 | 1,379 | 1.38 | 23.02 |
| 38 | 1,436 | 1.44 | 24.46 |
| 39 | 1,489 | 1.49 | 25.95 |
| 40 | 1,614 | 1.61 | 27.57 |
| 41 | 1,575 | 1.58 | 29.14 |
| 42 | 1,681 | 1.68 | 30.82 |
| 43 | 1,658 | 1.66 | 32.48 |
| 44 | 1,757 | 1.76 | 34.24 |
| 45 | 1,786 | 1.79 | 36.03 |
| 46 | 1,843 | 1.84 | 37.87 |
| 47 | 1,818 | 1.82 | 39.69 |
| 48 | 1,924 | 1.93 | 41.62 |
| 49 | 1,981 | 1.98 | 43.60 |
| 50 | 1,933 | 1.93 | 45.53 |
| 51 | 2,059 | 2.06 | 47.59 |
| 52 | 1,995 | 2.00 | 49.59 |
| 53 | 1,950 | 1.95 | 51.54 |
| 54 | 2,066 | 2.07 | 53.61 |
| 55 | 2,005 | 2.01 | 55.61 |
| 56 | 2,033 | 2.03 | 57.65 |
| 57 | 2,062 | 2.06 | 59.71 |
| 58 | 2,034 | 2.04 | 61.74 |
| 59 | 2,064 | 2.07 | 63.81 |
| 60 | 2,081 | 2.08 | 65.89 |
| 61 | 2,019 | 2.02 | 67.91 |
| 62 | 2,013 | 2.01 | 69.93 |
| 63 | 2,142 | 2.14 | 72.07 |
| 64 | 2,086 | 2.09 | 74.16 |
| 65 | 2,129 | 2.13 | 76.29 |
| 66 | 2,207 | 2.21 | 78.49 |
| 67 | 2,245 | 2.25 | 80.74 |
| 68 | 2,197 | 2.20 | 82.94 |
| 69 | 2,172 | 2.17 | 85.11 |
| 70 | 2,129 | 2.13 | 87.24 |
| 71 | 1,965 | 1.97 | 89.21 |
| 72 | 1,898 | 1.90 | 91.11 |
| 73 | 1,754 | 1.75 | 92.86 |
| 74 | 1,641 | 1.64 | 94.50 |
| 75 | 1,383 | 1.38 | 95.89 |
| 76 | 1,176 | 1.18 | 97.06 |
| 77 | 983 | 0.98 | 98.05 |
| 78 | 770 | 0.77 | 98.82 |
| 79 | 550 | 0.55 | 99.37 |
| 80 | 357 | 0.36 | 99.72 |
| 81 | 190 | 0.19 | 99.91 |
| 82 | 85 | 0.09 | 100.00 |

Table 7.A.29 Raw Score Frequency Distribution—Overall Score, Grade Two

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 0 | 180 | 0.19 | 0.19 |
| 1 | 106 | 0.11 | 0.30 |
| 2 | 133 | 0.14 | 0.44 |
| 3 | 121 | 0.13 | 0.56 |
| 4 | 135 | 0.14 | 0.71 |
| 5 | 141 | 0.15 | 0.85 |
| 6 | 113 | 0.12 | 0.97 |
| 7 | 134 | 0.14 | 1.11 |
| 8 | 150 | 0.16 | 1.27 |
| 9 | 161 | 0.17 | 1.44 |
| 10 | 174 | 0.18 | 1.62 |
| 11 | 146 | 0.15 | 1.77 |
| 12 | 171 | 0.18 | 1.95 |
| 13 | 168 | 0.18 | 2.13 |
| 14 | 171 | 0.18 | 2.30 |
| 15 | 203 | 0.21 | 2.52 |
| 16 | 181 | 0.19 | 2.71 |
| 17 | 222 | 0.23 | 2.94 |
| 18 | 245 | 0.26 | 3.19 |
| 19 | 260 | 0.27 | 3.47 |
| 20 | 278 | 0.29 | 3.76 |
| 21 | 252 | 0.26 | 4.02 |
| 22 | 276 | 0.29 | 4.31 |
| 23 | 276 | 0.29 | 4.60 |
| 24 | 267 | 0.28 | 4.88 |
| 25 | 288 | 0.30 | 5.18 |
| 26 | 286 | 0.30 | 5.48 |
| 27 | 284 | 0.30 | 5.77 |
| 28 | 310 | 0.32 | 6.10 |
| 29 | 377 | 0.39 | 6.49 |
| 30 | 369 | 0.39 | 6.88 |
| 31 | 393 | 0.41 | 7.29 |
| 32 | 412 | 0.43 | 7.72 |
| 33 | 434 | 0.45 | 8.17 |
| 34 | 487 | 0.51 | 8.68 |
| 35 | 496 | 0.52 | 9.20 |
| 36 | 492 | 0.51 | 9.71 |
| 37 | 572 | 0.60 | 10.31 |
| 38 | 588 | 0.61 | 10.93 |
| 39 | 697 | 0.73 | 11.65 |
| 40 | 655 | 0.68 | 12.34 |
| 41 | 685 | 0.72 | 13.05 |
| 42 | 744 | 0.78 | 13.83 |
| 43 | 851 | 0.89 | 14.72 |
| 44 | 830 | 0.87 | 15.59 |
| 45 | 893 | 0.93 | 16.52 |
| 46 | 914 | 0.96 | 17.48 |
| 47 | 957 | 1.00 | 18.48 |
| 48 | 940 | 0.98 | 19.46 |
| 49 | 1,070 | 1.12 | 20.58 |
| 50 | 1,062 | 1.11 | 21.69 |
| 51 | 1,122 | 1.17 | 22.86 |
| 52 | 1,090 | 1.14 | 24.00 |
| 53 | 1,192 | 1.25 | 25.25 |
| 54 | 1,205 | 1.26 | 26.51 |
| 55 | 1,343 | 1.40 | 27.91 |
| 56 | 1,364 | 1.43 | 29.34 |
| 57 | 1,437 | 1.50 | 30.84 |
| 58 | 1,405 | 1.47 | 32.31 |
| 59 | 1,421 | 1.49 | 33.79 |
| 60 | 1,543 | 1.61 | 35.41 |
| 61 | 1,515 | 1.58 | 36.99 |
| 62 | 1,539 | 1.61 | 38.60 |
| 63 | 1,733 | 1.81 | 40.41 |
| 64 | 1,713 | 1.79 | 42.20 |
| 65 | 1,826 | 1.91 | 44.11 |
| 66 | 1,870 | 1.95 | 46.06 |
| 67 | 1,874 | 1.96 | 48.02 |
| 68 | 1,972 | 2.06 | 50.08 |
| 69 | 2,097 | 2.19 | 52.28 |
| 70 | 2,069 | 2.16 | 54.44 |
| 71 | 2,214 | 2.31 | 56.75 |
| 72 | 2,258 | 2.36 | 59.11 |
| 73 | 2,327 | 2.43 | 61.55 |
| 74 | 2,510 | 2.62 | 64.17 |
| 75 | 2,535 | 2.65 | 66.82 |
| 76 | 2,637 | 2.76 | 69.58 |
| 77 | 2,648 | 2.77 | 72.34 |
| 78 | 2,798 | 2.92 | 75.27 |
| 79 | 2,755 | 2.88 | 78.15 |
| 80 | 2,678 | 2.80 | 80.95 |
| 81 | 2,573 | 2.69 | 83.64 |
| 82 | 2,557 | 2.67 | 86.31 |
| 83 | 2,494 | 2.61 | 88.92 |
| 84 | 2,332 | 2.44 | 91.35 |
| 85 | 2,005 | 2.10 | 93.45 |
| 86 | 1,724 | 1.80 | 95.25 |
| 87 | 1,423 | 1.49 | 96.74 |
| 88 | 1,143 | 1.19 | 97.93 |
| 89 | 818 | 0.86 | 98.79 |
| 90 | 572 | 0.60 | 99.39 |
| 91 | 362 | 0.38 | 99.77 |
| 92 | 171 | 0.18 | 99.94 |
| 93 | 53 | 0.06 | 100.00 |

Table 7.A.30 Raw Score Frequency Distribution—Overall Score, Grade Three

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 0 | 1 | 0.00 | 0.00 |
| 1 | 0 | 0.00 | 0.00 |
| 2 | 3 | 0.00 | 0.00 |
| 3 | 1 | 0.00 | 0.01 |
| 4 | 5 | 0.01 | 0.01 |
| 5 | 5 | 0.01 | 0.02 |
| 6 | 12 | 0.01 | 0.03 |
| 7 | 17 | 0.02 | 0.04 |
| 8 | 35 | 0.04 | 0.08 |
| 9 | 65 | 0.07 | 0.15 |
| 10 | 122 | 0.12 | 0.27 |
| 11 | 180 | 0.18 | 0.46 |
| 12 | 274 | 0.28 | 0.74 |
| 13 | 306 | 0.31 | 1.05 |
| 14 | 335 | 0.34 | 1.39 |
| 15 | 389 | 0.40 | 1.79 |
| 16 | 395 | 0.40 | 2.19 |
| 17 | 392 | 0.40 | 2.59 |
| 18 | 351 | 0.36 | 2.95 |
| 19 | 364 | 0.37 | 3.32 |
| 20 | 358 | 0.37 | 3.69 |
| 21 | 311 | 0.32 | 4.00 |
| 22 | 348 | 0.36 | 4.36 |
| 23 | 343 | 0.35 | 4.71 |
| 24 | 330 | 0.34 | 5.05 |
| 25 | 311 | 0.32 | 5.37 |
| 26 | 373 | 0.38 | 5.75 |
| 27 | 330 | 0.34 | 6.08 |
| 28 | 385 | 0.39 | 6.48 |
| 29 | 429 | 0.44 | 6.91 |
| 30 | 399 | 0.41 | 7.32 |
| 31 | 459 | 0.47 | 7.79 |
| 32 | 503 | 0.51 | 8.30 |
| 33 | 561 | 0.57 | 8.88 |
| 34 | 622 | 0.64 | 9.51 |
| 35 | 661 | 0.68 | 10.19 |
| 36 | 699 | 0.71 | 10.90 |
| 37 | 852 | 0.87 | 11.77 |
| 38 | 875 | 0.89 | 12.67 |
| 39 | 977 | 1.00 | 13.66 |
| 40 | 1,030 | 1.05 | 14.72 |
| 41 | 1,190 | 1.22 | 15.93 |
| 42 | 1,270 | 1.30 | 17.23 |
| 43 | 1,401 | 1.43 | 18.66 |
| 44 | 1,484 | 1.52 | 20.18 |
| 45 | 1,640 | 1.68 | 21.85 |
| 46 | 1,718 | 1.75 | 23.60 |
| 47 | 1,815 | 1.85 | 25.46 |
| 48 | 1,978 | 2.02 | 27.48 |
| 49 | 2,047 | 2.09 | 29.57 |
| 50 | 2,208 | 2.26 | 31.82 |
| 51 | 2,196 | 2.24 | 34.07 |
| 52 | 2,325 | 2.37 | 36.44 |
| 53 | 2,374 | 2.42 | 38.87 |
| 54 | 2,490 | 2.54 | 41.41 |
| 55 | 2,552 | 2.61 | 44.02 |
| 56 | 2,550 | 2.60 | 46.62 |
| 57 | 2,612 | 2.67 | 49.29 |
| 58 | 2,538 | 2.59 | 51.88 |
| 59 | 2,573 | 2.63 | 54.51 |
| 60 | 2,605 | 2.66 | 57.17 |
| 61 | 2,458 | 2.51 | 59.68 |
| 62 | 2,584 | 2.64 | 62.32 |
| 63 | 2,440 | 2.49 | 64.81 |
| 64 | 2,480 | 2.53 | 67.34 |
| 65 | 2,442 | 2.49 | 69.84 |
| 66 | 2,464 | 2.52 | 72.36 |
| 67 | 2,362 | 2.41 | 74.77 |
| 68 | 2,250 | 2.30 | 77.07 |
| 69 | 2,371 | 2.42 | 79.49 |
| 70 | 2,172 | 2.22 | 81.71 |
| 71 | 2,110 | 2.16 | 83.86 |
| 72 | 1,947 | 1.99 | 85.85 |
| 73 | 1,809 | 1.85 | 87.70 |
| 74 | 1,669 | 1.70 | 89.40 |
| 75 | 1,599 | 1.63 | 91.04 |
| 76 | 1,459 | 1.49 | 92.53 |
| 77 | 1,267 | 1.29 | 93.82 |
| 78 | 1,136 | 1.16 | 94.98 |
| 79 | 937 | 0.96 | 95.94 |
| 80 | 890 | 0.91 | 96.85 |
| 81 | 753 | 0.77 | 97.62 |
| 82 | 622 | 0.64 | 98.25 |
| 83 | 483 | 0.49 | 98.74 |
| 84 | 366 | 0.37 | 99.12 |
| 85 | 280 | 0.29 | 99.40 |
| 86 | 201 | 0.21 | 99.61 |
| 87 | 161 | 0.16 | 99.77 |
| 88 | 90 | 0.09 | 99.87 |
| 89 | 65 | 0.07 | 99.93 |
| 90 | 39 | 0.04 | 99.97 |
| 91 | 14 | 0.01 | 99.99 |
| 92 | 9 | 0.01 | 99.99 |
| 93 | 4 | 0.00 | 100.00 |
| 94 | 0 | 0.00 | 0.00 |
| 95 | 1 | 0.00 | 100.00 |

Table 7.A.31 Raw Score Frequency Distribution—Overall Score, Grade Four

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 0 | 2 | 0.00 | 0.00 |
| 1 | 0 | 0.00 | 0.00 |
| 2 | 2 | 0.00 | 0.00 |
| 3 | 4 | 0.00 | 0.01 |
| 4 | 1 | 0.00 | 0.01 |
| 5 | 7 | 0.01 | 0.02 |
| 6 | 6 | 0.01 | 0.02 |
| 7 | 18 | 0.02 | 0.04 |
| 8 | 41 | 0.04 | 0.09 |
| 9 | 49 | 0.05 | 0.14 |
| 10 | 101 | 0.11 | 0.25 |
| 11 | 138 | 0.15 | 0.39 |
| 12 | 196 | 0.21 | 0.60 |
| 13 | 231 | 0.25 | 0.84 |
| 14 | 268 | 0.28 | 1.13 |
| 15 | 332 | 0.35 | 1.48 |
| 16 | 336 | 0.36 | 1.84 |
| 17 | 325 | 0.34 | 2.18 |
| 18 | 304 | 0.32 | 2.51 |
| 19 | 296 | 0.31 | 2.82 |
| 20 | 262 | 0.28 | 3.10 |
| 21 | 257 | 0.27 | 3.37 |
| 22 | 240 | 0.25 | 3.62 |
| 23 | 212 | 0.22 | 3.85 |
| 24 | 194 | 0.21 | 4.06 |
| 25 | 219 | 0.23 | 4.29 |
| 26 | 220 | 0.23 | 4.52 |
| 27 | 195 | 0.21 | 4.73 |
| 28 | 226 | 0.24 | 4.97 |
| 29 | 237 | 0.25 | 5.22 |
| 30 | 216 | 0.23 | 5.45 |
| 31 | 245 | 0.26 | 5.71 |
| 32 | 268 | 0.28 | 5.99 |
| 33 | 252 | 0.27 | 6.26 |
| 34 | 288 | 0.31 | 6.57 |
| 35 | 329 | 0.35 | 6.92 |
| 36 | 334 | 0.35 | 7.27 |
| 37 | 389 | 0.41 | 7.68 |
| 38 | 443 | 0.47 | 8.15 |
| 39 | 451 | 0.48 | 8.63 |
| 40 | 510 | 0.54 | 9.17 |
| 41 | 539 | 0.57 | 9.74 |
| 42 | 616 | 0.65 | 10.40 |
| 43 | 701 | 0.74 | 11.14 |
| 44 | 764 | 0.81 | 11.95 |
| 45 | 773 | 0.82 | 12.77 |
| 46 | 917 | 0.97 | 13.75 |
| 47 | 965 | 1.02 | 14.77 |
| 48 | 1,010 | 1.07 | 15.84 |
| 49 | 1,117 | 1.19 | 17.03 |
| 50 | 1,239 | 1.31 | 18.34 |
| 51 | 1,293 | 1.37 | 19.71 |
| 52 | 1,419 | 1.51 | 21.22 |
| 53 | 1,468 | 1.56 | 22.78 |
| 54 | 1,611 | 1.71 | 24.49 |
| 55 | 1,709 | 1.81 | 26.30 |
| 56 | 1,773 | 1.88 | 28.18 |
| 57 | 1,888 | 2.00 | 30.18 |
| 58 | 1,950 | 2.07 | 32.25 |
| 59 | 2,042 | 2.17 | 34.42 |
| 60 | 2,078 | 2.21 | 36.63 |
| 61 | 2,190 | 2.32 | 38.95 |
| 62 | 2,328 | 2.47 | 41.42 |
| 63 | 2,313 | 2.45 | 43.87 |
| 64 | 2,390 | 2.54 | 46.41 |
| 65 | 2,405 | 2.55 | 48.96 |
| 66 | 2,526 | 2.68 | 51.64 |
| 67 | 2,544 | 2.70 | 54.34 |
| 68 | 2,632 | 2.79 | 57.14 |
| 69 | 2,670 | 2.83 | 59.97 |
| 70 | 2,677 | 2.84 | 62.81 |
| 71 | 2,780 | 2.95 | 65.76 |
| 72 | 2,707 | 2.87 | 68.63 |
| 73 | 2,737 | 2.90 | 71.54 |
| 74 | 2,711 | 2.88 | 74.41 |
| 75 | 2,715 | 2.88 | 77.29 |
| 76 | 2,680 | 2.84 | 80.14 |
| 77 | 2,539 | 2.69 | 82.83 |
| 78 | 2,473 | 2.62 | 85.46 |
| 79 | 2,324 | 2.47 | 87.92 |
| 80 | 2,226 | 2.36 | 90.28 |
| 81 | 1,935 | 2.05 | 92.34 |
| 82 | 1,672 | 1.77 | 94.11 |
| 83 | 1,423 | 1.51 | 95.62 |
| 84 | 1,209 | 1.28 | 96.90 |
| 85 | 947 | 1.00 | 97.91 |
| 86 | 690 | 0.73 | 98.64 |
| 87 | 492 | 0.52 | 99.16 |
| 88 | 343 | 0.36 | 99.53 |
| 89 | 213 | 0.23 | 99.75 |
| 90 | 112 | 0.12 | 99.87 |
| 91 | 67 | 0.07 | 99.94 |
| 92 | 37 | 0.04 | 99.98 |
| 93 | 13 | 0.01 | 100.00 |
| 94 | 3 | 0.00 | 100.00 |
| 95 | 0 | 0.00 | 0.00 |

Table 7.A.32 Raw Score Frequency Distribution—Overall Score, Grade Five

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 0 | 2 | 0.00 | 0.00 |
| 1 | 0 | 0.00 | 0.00 |
| 2 | 0 | 0.00 | 0.00 |
| 3 | 4 | 0.00 | 0.01 |
| 4 | 0 | 0.00 | 0.00 |
| 5 | 4 | 0.00 | 0.01 |
| 6 | 5 | 0.01 | 0.02 |
| 7 | 21 | 0.02 | 0.04 |
| 8 | 25 | 0.03 | 0.07 |
| 9 | 42 | 0.05 | 0.12 |
| 10 | 64 | 0.07 | 0.19 |
| 11 | 112 | 0.13 | 0.31 |
| 12 | 145 | 0.16 | 0.47 |
| 13 | 215 | 0.24 | 0.71 |
| 14 | 239 | 0.27 | 0.98 |
| 15 | 262 | 0.29 | 1.28 |
| 16 | 273 | 0.31 | 1.58 |
| 17 | 277 | 0.31 | 1.89 |
| 18 | 259 | 0.29 | 2.18 |
| 19 | 282 | 0.32 | 2.50 |
| 20 | 236 | 0.26 | 2.76 |
| 21 | 240 | 0.27 | 3.03 |
| 22 | 193 | 0.22 | 3.24 |
| 23 | 187 | 0.21 | 3.45 |
| 24 | 216 | 0.24 | 3.70 |
| 25 | 189 | 0.21 | 3.91 |
| 26 | 185 | 0.21 | 4.11 |
| 27 | 169 | 0.19 | 4.30 |
| 28 | 171 | 0.19 | 4.49 |
| 29 | 152 | 0.17 | 4.66 |
| 30 | 163 | 0.18 | 4.85 |
| 31 | 178 | 0.20 | 5.05 |
| 32 | 172 | 0.19 | 5.24 |
| 33 | 168 | 0.19 | 5.43 |
| 34 | 192 | 0.21 | 5.64 |
| 35 | 193 | 0.22 | 5.86 |
| 36 | 219 | 0.25 | 6.10 |
| 37 | 232 | 0.26 | 6.36 |
| 38 | 255 | 0.29 | 6.65 |
| 39 | 259 | 0.29 | 6.94 |
| 40 | 288 | 0.32 | 7.26 |
| 41 | 317 | 0.35 | 7.61 |
| 42 | 363 | 0.41 | 8.02 |
| 43 | 386 | 0.43 | 8.45 |
| 44 | 382 | 0.43 | 8.88 |
| 45 | 409 | 0.46 | 9.34 |
| 46 | 442 | 0.49 | 9.83 |
| 47 | 513 | 0.57 | 10.41 |
| 48 | 503 | 0.56 | 10.97 |
| 49 | 618 | 0.69 | 11.66 |
| 50 | 648 | 0.73 | 12.38 |
| 51 | 738 | 0.83 | 13.21 |
| 52 | 849 | 0.95 | 14.16 |
| 53 | 834 | 0.93 | 15.09 |
| 54 | 970 | 1.09 | 16.18 |
| 55 | 989 | 1.11 | 17.29 |
| 56 | 1,065 | 1.19 | 18.48 |
| 57 | 1,225 | 1.37 | 19.85 |
| 58 | 1,265 | 1.42 | 21.26 |
| 59 | 1,365 | 1.53 | 22.79 |
| 60 | 1,420 | 1.59 | 24.38 |
| 61 | 1,509 | 1.69 | 26.07 |
| 62 | 1,618 | 1.81 | 27.88 |
| 63 | 1,741 | 1.95 | 29.83 |
| 64 | 1,715 | 1.92 | 31.74 |
| 65 | 1,889 | 2.11 | 33.86 |
| 66 | 1,920 | 2.15 | 36.01 |
| 67 | 2,190 | 2.45 | 38.46 |
| 68 | 2,231 | 2.50 | 40.95 |
| 69 | 2,294 | 2.57 | 43.52 |
| 70 | 2,485 | 2.78 | 46.30 |
| 71 | 2,658 | 2.97 | 49.27 |
| 72 | 2,752 | 3.08 | 52.35 |
| 73 | 2,893 | 3.24 | 55.59 |
| 74 | 2,997 | 3.35 | 58.94 |
| 75 | 3,131 | 3.50 | 62.45 |
| 76 | 3,209 | 3.59 | 66.04 |
| 77 | 3,255 | 3.64 | 69.68 |
| 78 | 3,168 | 3.54 | 73.22 |
| 79 | 3,234 | 3.62 | 76.84 |
| 80 | 3,033 | 3.39 | 80.24 |
| 81 | 2,998 | 3.35 | 83.59 |
| 82 | 2,802 | 3.14 | 86.72 |
| 83 | 2,508 | 2.81 | 89.53 |
| 84 | 2,303 | 2.58 | 92.11 |
| 85 | 1,907 | 2.13 | 94.24 |
| 86 | 1,577 | 1.76 | 96.01 |
| 87 | 1,271 | 1.42 | 97.43 |
| 88 | 944 | 1.06 | 98.48 |
| 89 | 606 | 0.68 | 99.16 |
| 90 | 381 | 0.43 | 99.59 |
| 91 | 198 | 0.22 | 99.81 |
| 92 | 105 | 0.12 | 99.93 |
| 93 | 47 | 0.05 | 99.98 |
| 94 | 14 | 0.02 | 100.00 |
| 95 | 4 | 0.00 | 100.00 |

Table 7.A.33 Raw Score Frequency Distribution—Overall Score, Grade Six

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 0 | 0 | 0.00 | 0.00 |
| 1 | 0 | 0.00 | 0.00 |
| 2 | 2 | 0.00 | 0.00 |
| 3 | 0 | 0.00 | 0.00 |
| 4 | 1 | 0.00 | 0.00 |
| 5 | 0 | 0.00 | 0.00 |
| 6 | 3 | 0.00 | 0.01 |
| 7 | 6 | 0.01 | 0.02 |
| 8 | 22 | 0.03 | 0.04 |
| 9 | 35 | 0.05 | 0.09 |
| 10 | 46 | 0.06 | 0.15 |
| 11 | 110 | 0.14 | 0.30 |
| 12 | 146 | 0.19 | 0.49 |
| 13 | 163 | 0.21 | 0.70 |
| 14 | 197 | 0.26 | 0.96 |
| 15 | 234 | 0.31 | 1.27 |
| 16 | 238 | 0.31 | 1.59 |
| 17 | 259 | 0.34 | 1.93 |
| 18 | 284 | 0.37 | 2.30 |
| 19 | 258 | 0.34 | 2.64 |
| 20 | 224 | 0.30 | 2.94 |
| 21 | 223 | 0.29 | 3.23 |
| 22 | 215 | 0.28 | 3.51 |
| 23 | 227 | 0.30 | 3.81 |
| 24 | 215 | 0.28 | 4.10 |
| 25 | 193 | 0.25 | 4.35 |
| 26 | 233 | 0.31 | 4.66 |
| 27 | 205 | 0.27 | 4.93 |
| 28 | 177 | 0.23 | 5.16 |
| 29 | 217 | 0.29 | 5.45 |
| 30 | 220 | 0.29 | 5.74 |
| 31 | 277 | 0.37 | 6.10 |
| 32 | 267 | 0.35 | 6.45 |
| 33 | 242 | 0.32 | 6.77 |
| 34 | 301 | 0.40 | 7.17 |
| 35 | 309 | 0.41 | 7.58 |
| 36 | 316 | 0.42 | 7.99 |
| 37 | 342 | 0.45 | 8.44 |
| 38 | 408 | 0.54 | 8.98 |
| 39 | 421 | 0.55 | 9.54 |
| 40 | 475 | 0.63 | 10.16 |
| 41 | 518 | 0.68 | 10.85 |
| 42 | 538 | 0.71 | 11.55 |
| 43 | 571 | 0.75 | 12.31 |
| 44 | 619 | 0.82 | 13.12 |
| 45 | 643 | 0.85 | 13.97 |
| 46 | 750 | 0.99 | 14.96 |
| 47 | 790 | 1.04 | 16.00 |
| 48 | 814 | 1.07 | 17.07 |
| 49 | 920 | 1.21 | 18.28 |
| 50 | 977 | 1.29 | 19.57 |
| 51 | 1,038 | 1.37 | 20.94 |
| 52 | 1,118 | 1.47 | 22.41 |
| 53 | 1,169 | 1.54 | 23.95 |
| 54 | 1,212 | 1.60 | 25.55 |
| 55 | 1,351 | 1.78 | 27.33 |
| 56 | 1,393 | 1.84 | 29.17 |
| 57 | 1,502 | 1.98 | 31.15 |
| 58 | 1,604 | 2.11 | 33.26 |
| 59 | 1,614 | 2.13 | 35.39 |
| 60 | 1,641 | 2.16 | 37.55 |
| 61 | 1,780 | 2.35 | 39.90 |
| 62 | 1,829 | 2.41 | 42.31 |
| 63 | 1,903 | 2.51 | 44.82 |
| 64 | 1,936 | 2.55 | 47.37 |
| 65 | 2,023 | 2.67 | 50.03 |
| 66 | 1,993 | 2.63 | 52.66 |
| 67 | 2,118 | 2.79 | 55.45 |
| 68 | 2,188 | 2.88 | 58.33 |
| 69 | 2,230 | 2.94 | 61.27 |
| 70 | 2,202 | 2.90 | 64.18 |
| 71 | 2,275 | 3.00 | 67.17 |
| 72 | 2,130 | 2.81 | 69.98 |
| 73 | 2,197 | 2.90 | 72.88 |
| 74 | 2,062 | 2.72 | 75.59 |
| 75 | 2,112 | 2.78 | 78.38 |
| 76 | 2,015 | 2.66 | 81.03 |
| 77 | 1,942 | 2.56 | 83.59 |
| 78 | 1,860 | 2.45 | 86.04 |
| 79 | 1,685 | 2.22 | 88.26 |
| 80 | 1,571 | 2.07 | 90.33 |
| 81 | 1,459 | 1.92 | 92.26 |
| 82 | 1,224 | 1.61 | 93.87 |
| 83 | 1,113 | 1.47 | 95.34 |
| 84 | 905 | 1.19 | 96.53 |
| 85 | 770 | 1.01 | 97.54 |
| 86 | 603 | 0.79 | 98.34 |
| 87 | 453 | 0.60 | 98.94 |
| 88 | 299 | 0.39 | 99.33 |
| 89 | 216 | 0.28 | 99.62 |
| 90 | 151 | 0.20 | 99.81 |
| 91 | 71 | 0.09 | 99.91 |
| 92 | 48 | 0.06 | 99.97 |
| 93 | 13 | 0.02 | 99.99 |
| 94 | 8 | 0.01 | 100.00 |
| 95 | 1 | 0.00 | 100.00 |

Table 7.A.34 Raw Score Frequency Distribution—Overall Score, Grade Seven

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 0 | 1 | 0.00 | 0.00 |
| 1 | 0 | 0.00 | 0.00 |
| 2 | 0 | 0.00 | 0.00 |
| 3 | 0 | 0.00 | 0.00 |
| 4 | 1 | 0.00 | 0.00 |
| 5 | 1 | 0.00 | 0.00 |
| 6 | 4 | 0.01 | 0.01 |
| 7 | 4 | 0.01 | 0.02 |
| 8 | 20 | 0.03 | 0.05 |
| 9 | 21 | 0.03 | 0.08 |
| 10 | 55 | 0.08 | 0.16 |
| 11 | 88 | 0.13 | 0.29 |
| 12 | 139 | 0.21 | 0.50 |
| 13 | 143 | 0.22 | 0.72 |
| 14 | 220 | 0.33 | 1.05 |
| 15 | 210 | 0.32 | 1.37 |
| 16 | 268 | 0.40 | 1.77 |
| 17 | 270 | 0.41 | 2.18 |
| 18 | 242 | 0.37 | 2.55 |
| 19 | 275 | 0.41 | 2.96 |
| 20 | 252 | 0.38 | 3.34 |
| 21 | 260 | 0.39 | 3.73 |
| 22 | 266 | 0.40 | 4.13 |
| 23 | 212 | 0.32 | 4.45 |
| 24 | 226 | 0.34 | 4.80 |
| 25 | 174 | 0.26 | 5.06 |
| 26 | 190 | 0.29 | 5.34 |
| 27 | 197 | 0.30 | 5.64 |
| 28 | 183 | 0.28 | 5.92 |
| 29 | 198 | 0.30 | 6.22 |
| 30 | 184 | 0.28 | 6.49 |
| 31 | 225 | 0.34 | 6.83 |
| 32 | 226 | 0.34 | 7.18 |
| 33 | 207 | 0.31 | 7.49 |
| 34 | 223 | 0.34 | 7.82 |
| 35 | 232 | 0.35 | 8.17 |
| 36 | 248 | 0.37 | 8.55 |
| 37 | 261 | 0.39 | 8.94 |
| 38 | 272 | 0.41 | 9.35 |
| 39 | 334 | 0.50 | 9.86 |
| 40 | 323 | 0.49 | 10.34 |
| 41 | 337 | 0.51 | 10.85 |
| 42 | 343 | 0.52 | 11.37 |
| 43 | 372 | 0.56 | 11.93 |
| 44 | 414 | 0.62 | 12.56 |
| 45 | 439 | 0.66 | 13.22 |
| 46 | 461 | 0.70 | 13.91 |
| 47 | 482 | 0.73 | 14.64 |
| 48 | 585 | 0.88 | 15.52 |
| 49 | 634 | 0.96 | 16.48 |
| 50 | 637 | 0.96 | 17.44 |
| 51 | 693 | 1.05 | 18.49 |
| 52 | 738 | 1.11 | 19.60 |
| 53 | 777 | 1.17 | 20.77 |
| 54 | 864 | 1.30 | 22.08 |
| 55 | 875 | 1.32 | 23.40 |
| 56 | 921 | 1.39 | 24.79 |
| 57 | 1,020 | 1.54 | 26.33 |
| 58 | 1,060 | 1.60 | 27.93 |
| 59 | 1,179 | 1.78 | 29.71 |
| 60 | 1,287 | 1.94 | 31.65 |
| 61 | 1,295 | 1.95 | 33.60 |
| 62 | 1,293 | 1.95 | 35.55 |
| 63 | 1,392 | 2.10 | 37.65 |
| 64 | 1,393 | 2.10 | 39.75 |
| 65 | 1,441 | 2.17 | 41.93 |
| 66 | 1,561 | 2.36 | 44.28 |
| 67 | 1,567 | 2.36 | 46.65 |
| 68 | 1,695 | 2.56 | 49.21 |
| 69 | 1,695 | 2.56 | 51.76 |
| 70 | 1,769 | 2.67 | 54.43 |
| 71 | 1,691 | 2.55 | 56.99 |
| 72 | 1,781 | 2.69 | 59.67 |
| 73 | 1,912 | 2.89 | 62.56 |
| 74 | 1,846 | 2.79 | 65.34 |
| 75 | 1,938 | 2.92 | 68.27 |
| 76 | 1,920 | 2.90 | 71.17 |
| 77 | 1,922 | 2.90 | 74.07 |
| 78 | 1,968 | 2.97 | 77.04 |
| 79 | 1,906 | 2.88 | 79.91 |
| 80 | 1,865 | 2.81 | 82.73 |
| 81 | 1,876 | 2.83 | 85.56 |
| 82 | 1,724 | 2.60 | 88.16 |
| 83 | 1,560 | 2.35 | 90.51 |
| 84 | 1,481 | 2.23 | 92.75 |
| 85 | 1,284 | 1.94 | 94.68 |
| 86 | 1,040 | 1.57 | 96.25 |
| 87 | 796 | 1.20 | 97.45 |
| 88 | 649 | 0.98 | 98.43 |
| 89 | 450 | 0.68 | 99.11 |
| 90 | 297 | 0.45 | 99.56 |
| 91 | 157 | 0.24 | 99.80 |
| 92 | 81 | 0.12 | 99.92 |
| 93 | 37 | 0.06 | 99.98 |
| 94 | 13 | 0.02 | 100.00 |
| 95 | 3 | 0.00 | 100.00 |

Table 7.A.35 Raw Score Frequency Distribution—Overall Score, Grade Eight

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 0 | 0 | 0.00 | 0.00 |
| 1 | 0 | 0.00 | 0.00 |
| 2 | 0 | 0.00 | 0.00 |
| 3 | 0 | 0.00 | 0.00 |
| 4 | 0 | 0.00 | 0.00 |
| 5 | 1 | 0.00 | 0.00 |
| 6 | 3 | 0.00 | 0.01 |
| 7 | 8 | 0.01 | 0.02 |
| 8 | 14 | 0.02 | 0.04 |
| 9 | 24 | 0.04 | 0.08 |
| 10 | 57 | 0.09 | 0.18 |
| 11 | 62 | 0.10 | 0.28 |
| 12 | 111 | 0.18 | 0.46 |
| 13 | 144 | 0.24 | 0.70 |
| 14 | 162 | 0.27 | 0.97 |
| 15 | 202 | 0.33 | 1.30 |
| 16 | 212 | 0.35 | 1.65 |
| 17 | 231 | 0.38 | 2.03 |
| 18 | 228 | 0.38 | 2.41 |
| 19 | 255 | 0.42 | 2.83 |
| 20 | 239 | 0.40 | 3.23 |
| 21 | 223 | 0.37 | 3.60 |
| 22 | 236 | 0.39 | 3.99 |
| 23 | 201 | 0.33 | 4.32 |
| 24 | 210 | 0.35 | 4.67 |
| 25 | 199 | 0.33 | 5.00 |
| 26 | 203 | 0.34 | 5.33 |
| 27 | 169 | 0.28 | 5.61 |
| 28 | 208 | 0.34 | 5.95 |
| 29 | 155 | 0.26 | 6.21 |
| 30 | 173 | 0.29 | 6.50 |
| 31 | 186 | 0.31 | 6.80 |
| 32 | 192 | 0.32 | 7.12 |
| 33 | 205 | 0.34 | 7.46 |
| 34 | 184 | 0.30 | 7.76 |
| 35 | 193 | 0.32 | 8.08 |
| 36 | 234 | 0.39 | 8.47 |
| 37 | 209 | 0.35 | 8.82 |
| 38 | 238 | 0.39 | 9.21 |
| 39 | 264 | 0.44 | 9.64 |
| 40 | 240 | 0.40 | 10.04 |
| 41 | 256 | 0.42 | 10.46 |
| 42 | 275 | 0.45 | 10.92 |
| 43 | 301 | 0.50 | 11.42 |
| 44 | 307 | 0.51 | 11.92 |
| 45 | 379 | 0.63 | 12.55 |
| 46 | 363 | 0.60 | 13.15 |
| 47 | 395 | 0.65 | 13.80 |
| 48 | 416 | 0.69 | 14.49 |
| 49 | 410 | 0.68 | 15.17 |
| 50 | 476 | 0.79 | 15.96 |
| 51 | 453 | 0.75 | 16.70 |
| 52 | 527 | 0.87 | 17.58 |
| 53 | 536 | 0.89 | 18.46 |
| 54 | 609 | 1.01 | 19.47 |
| 55 | 663 | 1.10 | 20.56 |
| 56 | 668 | 1.10 | 21.67 |
| 57 | 740 | 1.22 | 22.89 |
| 58 | 776 | 1.28 | 24.17 |
| 59 | 837 | 1.38 | 25.56 |
| 60 | 917 | 1.52 | 27.07 |
| 61 | 919 | 1.52 | 28.59 |
| 62 | 917 | 1.52 | 30.11 |
| 63 | 955 | 1.58 | 31.69 |
| 64 | 1,052 | 1.74 | 33.43 |
| 65 | 1,049 | 1.73 | 35.16 |
| 66 | 1,202 | 1.99 | 37.15 |
| 67 | 1,201 | 1.99 | 39.13 |
| 68 | 1,305 | 2.16 | 41.29 |
| 69 | 1,390 | 2.30 | 43.59 |
| 70 | 1,388 | 2.29 | 45.88 |
| 71 | 1,453 | 2.40 | 48.28 |
| 72 | 1,526 | 2.52 | 50.80 |
| 73 | 1,705 | 2.82 | 53.62 |
| 74 | 1,636 | 2.70 | 56.33 |
| 75 | 1,764 | 2.92 | 59.24 |
| 76 | 1,776 | 2.94 | 62.18 |
| 77 | 1,920 | 3.17 | 65.35 |
| 78 | 1,930 | 3.19 | 68.54 |
| 79 | 2,016 | 3.33 | 71.88 |
| 80 | 2,019 | 3.34 | 75.21 |
| 81 | 2,034 | 3.36 | 78.57 |
| 82 | 1,982 | 3.28 | 81.85 |
| 83 | 1,858 | 3.07 | 84.92 |
| 84 | 1,743 | 2.88 | 87.80 |
| 85 | 1,654 | 2.73 | 90.54 |
| 86 | 1,497 | 2.47 | 93.01 |
| 87 | 1,264 | 2.09 | 95.10 |
| 88 | 1,008 | 1.67 | 96.77 |
| 89 | 781 | 1.29 | 98.06 |
| 90 | 534 | 0.88 | 98.94 |
| 91 | 348 | 0.58 | 99.52 |
| 92 | 186 | 0.31 | 99.82 |
| 93 | 74 | 0.12 | 99.95 |
| 94 | 28 | 0.05 | 99.99 |
| 95 | 5 | 0.01 | 100.00 |

Table 7.A.36 Raw Score Frequency Distribution—Overall Score, Grade Nine

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 0 | 0 | 0.00 | 0.00 |
| 1 | 0 | 0.00 | 0.00 |
| 2 | 0 | 0.00 | 0.00 |
| 3 | 0 | 0.00 | 0.00 |
| 4 | 0 | 0.00 | 0.00 |
| 5 | 3 | 0.00 | 0.00 |
| 6 | 6 | 0.01 | 0.01 |
| 7 | 16 | 0.03 | 0.04 |
| 8 | 37 | 0.06 | 0.10 |
| 9 | 90 | 0.15 | 0.25 |
| 10 | 124 | 0.21 | 0.46 |
| 11 | 235 | 0.39 | 0.85 |
| 12 | 295 | 0.49 | 1.34 |
| 13 | 378 | 0.63 | 1.97 |
| 14 | 426 | 0.71 | 2.68 |
| 15 | 452 | 0.75 | 3.43 |
| 16 | 501 | 0.83 | 4.26 |
| 17 | 494 | 0.82 | 5.08 |
| 18 | 448 | 0.75 | 5.83 |
| 19 | 450 | 0.75 | 6.58 |
| 20 | 417 | 0.69 | 7.27 |
| 21 | 363 | 0.60 | 7.87 |
| 22 | 325 | 0.54 | 8.42 |
| 23 | 290 | 0.48 | 8.90 |
| 24 | 272 | 0.45 | 9.35 |
| 25 | 265 | 0.44 | 9.79 |
| 26 | 245 | 0.41 | 10.20 |
| 27 | 219 | 0.36 | 10.56 |
| 28 | 182 | 0.30 | 10.86 |
| 29 | 230 | 0.38 | 11.25 |
| 30 | 200 | 0.33 | 11.58 |
| 31 | 243 | 0.40 | 11.98 |
| 32 | 233 | 0.39 | 12.37 |
| 33 | 216 | 0.36 | 12.73 |
| 34 | 205 | 0.34 | 13.07 |
| 35 | 225 | 0.37 | 13.45 |
| 36 | 253 | 0.42 | 13.87 |
| 37 | 227 | 0.38 | 14.24 |
| 38 | 269 | 0.45 | 14.69 |
| 39 | 276 | 0.46 | 15.15 |
| 40 | 266 | 0.44 | 15.59 |
| 41 | 292 | 0.49 | 16.08 |
| 42 | 340 | 0.57 | 16.64 |
| 43 | 348 | 0.58 | 17.22 |
| 44 | 362 | 0.60 | 17.83 |
| 45 | 401 | 0.67 | 18.49 |
| 46 | 429 | 0.71 | 19.21 |
| 47 | 488 | 0.81 | 20.02 |
| 48 | 464 | 0.77 | 20.79 |
| 49 | 522 | 0.87 | 21.66 |
| 50 | 580 | 0.96 | 22.62 |
| 51 | 588 | 0.98 | 23.60 |
| 52 | 661 | 1.10 | 24.70 |
| 53 | 788 | 1.31 | 26.01 |
| 54 | 793 | 1.32 | 27.33 |
| 55 | 825 | 1.37 | 28.70 |
| 56 | 876 | 1.46 | 30.16 |
| 57 | 912 | 1.52 | 31.67 |
| 58 | 969 | 1.61 | 33.29 |
| 59 | 1,014 | 1.69 | 34.97 |
| 60 | 1,103 | 1.83 | 36.81 |
| 61 | 1,134 | 1.89 | 38.69 |
| 62 | 1,184 | 1.97 | 40.66 |
| 63 | 1,228 | 2.04 | 42.70 |
| 64 | 1,284 | 2.14 | 44.84 |
| 65 | 1,358 | 2.26 | 47.10 |
| 66 | 1,440 | 2.39 | 49.49 |
| 67 | 1,494 | 2.48 | 51.98 |
| 68 | 1,631 | 2.71 | 54.69 |
| 69 | 1,658 | 2.76 | 57.45 |
| 70 | 1,667 | 2.77 | 60.22 |
| 71 | 1,712 | 2.85 | 63.07 |
| 72 | 1,819 | 3.03 | 66.09 |
| 73 | 1,778 | 2.96 | 69.05 |
| 74 | 1,844 | 3.07 | 72.11 |
| 75 | 1,791 | 2.98 | 75.09 |
| 76 | 1,880 | 3.13 | 78.22 |
| 77 | 1,766 | 2.94 | 81.16 |
| 78 | 1,710 | 2.84 | 84.00 |
| 79 | 1,604 | 2.67 | 86.67 |
| 80 | 1,432 | 2.38 | 89.05 |
| 81 | 1,343 | 2.23 | 91.28 |
| 82 | 1,204 | 2.00 | 93.29 |
| 83 | 982 | 1.63 | 94.92 |
| 84 | 839 | 1.40 | 96.31 |
| 85 | 656 | 1.09 | 97.41 |
| 86 | 504 | 0.84 | 98.24 |
| 87 | 365 | 0.61 | 98.85 |
| 88 | 265 | 0.44 | 99.29 |
| 89 | 163 | 0.27 | 99.56 |
| 90 | 134 | 0.22 | 99.79 |
| 91 | 66 | 0.11 | 99.90 |
| 92 | 35 | 0.06 | 99.95 |
| 93 | 20 | 0.03 | 99.99 |
| 94 | 6 | 0.01 | 100.00 |
| 95 | 2 | 0.00 | 100.00 |

Table 7.A.37 Raw Score Frequency Distribution—Overall Score, Grade Ten

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 0 | 1 | 0.00 | 0.00 |
| 1 | 1 | 0.00 | 0.00 |
| 2 | 0 | 0.00 | 0.00 |
| 3 | 0 | 0.00 | 0.00 |
| 4 | 0 | 0.00 | 0.00 |
| 5 | 3 | 0.01 | 0.01 |
| 6 | 4 | 0.01 | 0.02 |
| 7 | 10 | 0.02 | 0.03 |
| 8 | 24 | 0.04 | 0.08 |
| 9 | 39 | 0.07 | 0.14 |
| 10 | 83 | 0.14 | 0.29 |
| 11 | 118 | 0.21 | 0.49 |
| 12 | 161 | 0.28 | 0.77 |
| 13 | 214 | 0.37 | 1.15 |
| 14 | 285 | 0.50 | 1.64 |
| 15 | 303 | 0.53 | 2.17 |
| 16 | 358 | 0.62 | 2.80 |
| 17 | 374 | 0.65 | 3.45 |
| 18 | 372 | 0.65 | 4.10 |
| 19 | 340 | 0.59 | 4.69 |
| 20 | 363 | 0.63 | 5.33 |
| 21 | 309 | 0.54 | 5.86 |
| 22 | 281 | 0.49 | 6.35 |
| 23 | 308 | 0.54 | 6.89 |
| 24 | 271 | 0.47 | 7.36 |
| 25 | 239 | 0.42 | 7.78 |
| 26 | 262 | 0.46 | 8.24 |
| 27 | 228 | 0.40 | 8.64 |
| 28 | 240 | 0.42 | 9.05 |
| 29 | 225 | 0.39 | 9.45 |
| 30 | 202 | 0.35 | 9.80 |
| 31 | 238 | 0.42 | 10.21 |
| 32 | 214 | 0.37 | 10.59 |
| 33 | 202 | 0.35 | 10.94 |
| 34 | 211 | 0.37 | 11.31 |
| 35 | 218 | 0.38 | 11.69 |
| 36 | 235 | 0.41 | 12.10 |
| 37 | 212 | 0.37 | 12.47 |
| 38 | 228 | 0.40 | 12.87 |
| 39 | 250 | 0.44 | 13.30 |
| 40 | 275 | 0.48 | 13.78 |
| 41 | 249 | 0.43 | 14.22 |
| 42 | 253 | 0.44 | 14.66 |
| 43 | 308 | 0.54 | 15.19 |
| 44 | 339 | 0.59 | 15.79 |
| 45 | 329 | 0.57 | 16.36 |
| 46 | 301 | 0.53 | 16.88 |
| 47 | 404 | 0.70 | 17.59 |
| 48 | 443 | 0.77 | 18.36 |
| 49 | 475 | 0.83 | 19.19 |
| 50 | 456 | 0.80 | 19.99 |
| 51 | 491 | 0.86 | 20.84 |
| 52 | 562 | 0.98 | 21.82 |
| 53 | 605 | 1.06 | 22.88 |
| 54 | 607 | 1.06 | 23.94 |
| 55 | 640 | 1.12 | 25.05 |
| 56 | 682 | 1.19 | 26.24 |
| 57 | 702 | 1.22 | 27.47 |
| 58 | 758 | 1.32 | 28.79 |
| 59 | 812 | 1.42 | 30.21 |
| 60 | 948 | 1.65 | 31.86 |
| 61 | 945 | 1.65 | 33.51 |
| 62 | 975 | 1.70 | 35.21 |
| 63 | 1,003 | 1.75 | 36.96 |
| 64 | 1,092 | 1.90 | 38.86 |
| 65 | 1,169 | 2.04 | 40.90 |
| 66 | 1,168 | 2.04 | 42.94 |
| 67 | 1,215 | 2.12 | 45.06 |
| 68 | 1,357 | 2.37 | 47.43 |
| 69 | 1,382 | 2.41 | 49.84 |
| 70 | 1,519 | 2.65 | 52.49 |
| 71 | 1,494 | 2.61 | 55.09 |
| 72 | 1,554 | 2.71 | 57.80 |
| 73 | 1,701 | 2.97 | 60.77 |
| 74 | 1,688 | 2.94 | 63.71 |
| 75 | 1,740 | 3.04 | 66.75 |
| 76 | 1,771 | 3.09 | 69.84 |
| 77 | 1,869 | 3.26 | 73.10 |
| 78 | 1,939 | 3.38 | 76.48 |
| 79 | 1,821 | 3.18 | 79.66 |
| 80 | 1,774 | 3.09 | 82.75 |
| 81 | 1,689 | 2.95 | 85.70 |
| 82 | 1,558 | 2.72 | 88.41 |
| 83 | 1,429 | 2.49 | 90.91 |
| 84 | 1,338 | 2.33 | 93.24 |
| 85 | 1,106 | 1.93 | 95.17 |
| 86 | 860 | 1.50 | 96.67 |
| 87 | 701 | 1.22 | 97.89 |
| 88 | 489 | 0.85 | 98.75 |
| 89 | 320 | 0.56 | 99.30 |
| 90 | 186 | 0.32 | 99.63 |
| 91 | 118 | 0.21 | 99.83 |
| 92 | 55 | 0.10 | 99.93 |
| 93 | 26 | 0.05 | 99.98 |
| 94 | 11 | 0.02 | 99.99 |
| 95 | 3 | 0.01 | 100.00 |

Table 7.A.38 Raw Score Frequency Distribution—Overall Score, Grade Eleven

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 0 | 0 | 0.00 | 0.00 |
| 1 | 0 | 0.00 | 0.00 |
| 2 | 0 | 0.00 | 0.00 |
| 3 | 0 | 0.00 | 0.00 |
| 4 | 0 | 0.00 | 0.00 |
| 5 | 2 | 0.00 | 0.00 |
| 6 | 3 | 0.01 | 0.01 |
| 7 | 4 | 0.01 | 0.02 |
| 8 | 16 | 0.03 | 0.05 |
| 9 | 35 | 0.07 | 0.12 |
| 10 | 62 | 0.13 | 0.25 |
| 11 | 77 | 0.16 | 0.40 |
| 12 | 117 | 0.24 | 0.64 |
| 13 | 180 | 0.36 | 1.00 |
| 14 | 217 | 0.44 | 1.44 |
| 15 | 218 | 0.44 | 1.88 |
| 16 | 257 | 0.52 | 2.40 |
| 17 | 279 | 0.56 | 2.97 |
| 18 | 290 | 0.59 | 3.55 |
| 19 | 291 | 0.59 | 4.14 |
| 20 | 260 | 0.53 | 4.67 |
| 21 | 218 | 0.44 | 5.11 |
| 22 | 226 | 0.46 | 5.56 |
| 23 | 208 | 0.42 | 5.98 |
| 24 | 207 | 0.42 | 6.40 |
| 25 | 204 | 0.41 | 6.82 |
| 26 | 160 | 0.32 | 7.14 |
| 27 | 181 | 0.37 | 7.51 |
| 28 | 176 | 0.36 | 7.86 |
| 29 | 178 | 0.36 | 8.22 |
| 30 | 188 | 0.38 | 8.60 |
| 31 | 198 | 0.40 | 9.00 |
| 32 | 208 | 0.42 | 9.42 |
| 33 | 195 | 0.39 | 9.82 |
| 34 | 221 | 0.45 | 10.26 |
| 35 | 227 | 0.46 | 10.72 |
| 36 | 220 | 0.44 | 11.17 |
| 37 | 221 | 0.45 | 11.61 |
| 38 | 237 | 0.48 | 12.09 |
| 39 | 239 | 0.48 | 12.58 |
| 40 | 274 | 0.55 | 13.13 |
| 41 | 285 | 0.58 | 13.71 |
| 42 | 252 | 0.51 | 14.22 |
| 43 | 307 | 0.62 | 14.84 |
| 44 | 323 | 0.65 | 15.49 |
| 45 | 338 | 0.68 | 16.17 |
| 46 | 368 | 0.74 | 16.92 |
| 47 | 353 | 0.71 | 17.63 |
| 48 | 407 | 0.82 | 18.45 |
| 49 | 449 | 0.91 | 19.36 |
| 50 | 471 | 0.95 | 20.31 |
| 51 | 468 | 0.95 | 21.26 |
| 52 | 557 | 1.13 | 22.39 |
| 53 | 569 | 1.15 | 23.54 |
| 54 | 639 | 1.29 | 24.83 |
| 55 | 652 | 1.32 | 26.15 |
| 56 | 678 | 1.37 | 27.52 |
| 57 | 701 | 1.42 | 28.93 |
| 58 | 793 | 1.60 | 30.54 |
| 59 | 850 | 1.72 | 32.26 |
| 60 | 898 | 1.82 | 34.07 |
| 61 | 965 | 1.95 | 36.02 |
| 62 | 938 | 1.90 | 37.92 |
| 63 | 1,004 | 2.03 | 39.95 |
| 64 | 1,037 | 2.10 | 42.05 |
| 65 | 1,156 | 2.34 | 44.38 |
| 66 | 1,237 | 2.50 | 46.88 |
| 67 | 1,174 | 2.37 | 49.26 |
| 68 | 1,284 | 2.60 | 51.85 |
| 69 | 1,309 | 2.65 | 54.50 |
| 70 | 1,384 | 2.80 | 57.30 |
| 71 | 1,412 | 2.85 | 60.15 |
| 72 | 1,470 | 2.97 | 63.13 |
| 73 | 1,500 | 3.03 | 66.16 |
| 74 | 1,511 | 3.05 | 69.21 |
| 75 | 1,592 | 3.22 | 72.43 |
| 76 | 1,563 | 3.16 | 75.59 |
| 77 | 1,538 | 3.11 | 78.70 |
| 78 | 1,544 | 3.12 | 81.82 |
| 79 | 1,461 | 2.95 | 84.78 |
| 80 | 1,313 | 2.65 | 87.43 |
| 81 | 1,239 | 2.51 | 89.94 |
| 82 | 1,156 | 2.34 | 92.27 |
| 83 | 901 | 1.82 | 94.10 |
| 84 | 748 | 1.51 | 95.61 |
| 85 | 641 | 1.30 | 96.90 |
| 86 | 529 | 1.07 | 97.97 |
| 87 | 353 | 0.71 | 98.69 |
| 88 | 258 | 0.52 | 99.21 |
| 89 | 192 | 0.39 | 99.60 |
| 90 | 95 | 0.19 | 99.79 |
| 91 | 62 | 0.13 | 99.92 |
| 92 | 25 | 0.05 | 99.97 |
| 93 | 13 | 0.03 | 99.99 |
| 94 | 3 | 0.01 | 100.00 |
| 95 | 1 | 0.00 | 100.00 |

Table 7.A.39 Raw Score Frequency Distribution—Overall Score, Grade Twelve

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 0 | 1 | 0.00 | 0.00 |
| 1 | 0 | 0.00 | 0.00 |
| 2 | 0 | 0.00 | 0.00 |
| 3 | 0 | 0.00 | 0.00 |
| 4 | 0 | 0.00 | 0.00 |
| 5 | 0 | 0.00 | 0.00 |
| 6 | 1 | 0.00 | 0.01 |
| 7 | 3 | 0.01 | 0.01 |
| 8 | 5 | 0.01 | 0.03 |
| 9 | 24 | 0.06 | 0.09 |
| 10 | 36 | 0.09 | 0.18 |
| 11 | 66 | 0.17 | 0.34 |
| 12 | 92 | 0.23 | 0.58 |
| 13 | 118 | 0.30 | 0.87 |
| 14 | 145 | 0.37 | 1.24 |
| 15 | 190 | 0.48 | 1.72 |
| 16 | 203 | 0.51 | 2.23 |
| 17 | 198 | 0.50 | 2.73 |
| 18 | 222 | 0.56 | 3.29 |
| 19 | 204 | 0.51 | 3.80 |
| 20 | 197 | 0.50 | 4.30 |
| 21 | 179 | 0.45 | 4.75 |
| 22 | 190 | 0.48 | 5.23 |
| 23 | 187 | 0.47 | 5.70 |
| 24 | 170 | 0.43 | 6.13 |
| 25 | 142 | 0.36 | 6.49 |
| 26 | 160 | 0.40 | 6.89 |
| 27 | 157 | 0.40 | 7.29 |
| 28 | 167 | 0.42 | 7.71 |
| 29 | 149 | 0.38 | 8.09 |
| 30 | 139 | 0.35 | 8.44 |
| 31 | 152 | 0.38 | 8.82 |
| 32 | 170 | 0.43 | 9.25 |
| 33 | 163 | 0.41 | 9.66 |
| 34 | 187 | 0.47 | 10.13 |
| 35 | 179 | 0.45 | 10.58 |
| 36 | 192 | 0.48 | 11.07 |
| 37 | 184 | 0.46 | 11.53 |
| 38 | 222 | 0.56 | 12.09 |
| 39 | 220 | 0.55 | 12.65 |
| 40 | 219 | 0.55 | 13.20 |
| 41 | 286 | 0.72 | 13.92 |
| 42 | 226 | 0.57 | 14.49 |
| 43 | 288 | 0.73 | 15.21 |
| 44 | 314 | 0.79 | 16.01 |
| 45 | 326 | 0.82 | 16.83 |
| 46 | 339 | 0.85 | 17.68 |
| 47 | 382 | 0.96 | 18.65 |
| 48 | 374 | 0.94 | 19.59 |
| 49 | 398 | 1.00 | 20.59 |
| 50 | 388 | 0.98 | 21.57 |
| 51 | 427 | 1.08 | 22.65 |
| 52 | 461 | 1.16 | 23.81 |
| 53 | 511 | 1.29 | 25.10 |
| 54 | 530 | 1.34 | 26.44 |
| 55 | 523 | 1.32 | 27.76 |
| 56 | 576 | 1.45 | 29.21 |
| 57 | 601 | 1.52 | 30.72 |
| 58 | 638 | 1.61 | 32.33 |
| 59 | 661 | 1.67 | 34.00 |
| 60 | 714 | 1.80 | 35.80 |
| 61 | 716 | 1.81 | 37.61 |
| 62 | 776 | 1.96 | 39.56 |
| 63 | 808 | 2.04 | 41.60 |
| 64 | 858 | 2.16 | 43.77 |
| 65 | 865 | 2.18 | 45.95 |
| 66 | 879 | 2.22 | 48.16 |
| 67 | 976 | 2.46 | 50.63 |
| 68 | 954 | 2.41 | 53.03 |
| 69 | 1,057 | 2.67 | 55.70 |
| 70 | 1,032 | 2.60 | 58.30 |
| 71 | 1,077 | 2.72 | 61.02 |
| 72 | 1,161 | 2.93 | 63.94 |
| 73 | 1,140 | 2.88 | 66.82 |
| 74 | 1,175 | 2.96 | 69.78 |
| 75 | 1,180 | 2.98 | 72.76 |
| 76 | 1,219 | 3.07 | 75.83 |
| 77 | 1,202 | 3.03 | 78.86 |
| 78 | 1,115 | 2.81 | 81.68 |
| 79 | 1,122 | 2.83 | 84.51 |
| 80 | 1,059 | 2.67 | 87.18 |
| 81 | 1,000 | 2.52 | 89.70 |
| 82 | 865 | 2.18 | 91.88 |
| 83 | 767 | 1.93 | 93.81 |
| 84 | 690 | 1.74 | 95.55 |
| 85 | 517 | 1.30 | 96.86 |
| 86 | 400 | 1.01 | 97.87 |
| 87 | 288 | 0.73 | 98.59 |
| 88 | 228 | 0.58 | 99.17 |
| 89 | 134 | 0.34 | 99.51 |
| 90 | 102 | 0.26 | 99.76 |
| 91 | 57 | 0.14 | 99.91 |
| 92 | 22 | 0.06 | 99.96 |
| 93 | 6 | 0.02 | 99.98 |
| 94 | 8 | 0.02 | 100.00 |
| 95 | 1 | 0.00 | 100.00 |

### Appendix 7.B: Raw-to-Scale-Score Conversions

Table 7.B.1 Raw-to-Scale-Score Conversion Table—Oral Language, Kindergarten

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Scale Score** | **CSEM** | **Level** |
| 0 | 1150 | 176 | Level 1 |
| 1 | 1266 | 36 | Level 1 |
| 2 | 1293 | 24 | Level 1 |
| 3 | 1308 | 19 | Level 1 |
| 4 | 1319 | 16 | Level 1 |
| 5 | 1328 | 15 | Level 1 |
| 6 | 1335 | 14 | Level 1 |
| 7 | 1342 | 13 | Level 1 |
| 8 | 1348 | 12 | Level 1 |
| 9 | 1353 | 12 | Level 1 |
| 10 | 1358 | 11 | Level 1 |
| 11 | 1363 | 11 | Level 1 |
| 12 | 1368 | 11 | Level 1 |
| 13 | 1372 | 11 | Level 1 |
| 14 | 1376 | 10 | Level 1 |
| 15 | 1380 | 10 | Level 1 |
| 16 | 1384 | 10 | Level 1 |
| 17 | 1388 | 10 | Level 2 |
| 18 | 1392 | 10 | Level 2 |
| 19 | 1395 | 10 | Level 2 |
| 20 | 1399 | 10 | Level 2 |
| 21 | 1403 | 10 | Level 2 |
| 22 | 1406 | 10 | Level 2 |
| 23 | 1410 | 10 | Level 2 |
| 24 | 1414 | 10 | Level 2 |
| 25 | 1418 | 10 | Level 2 |
| 26 | 1422 | 10 | Level 2 |
| 27 | 1426 | 11 | Level 2 |
| 28 | 1431 | 11 | Level 3 |
| 29 | 1436 | 12 | Level 3 |
| 30 | 1441 | 12 | Level 3 |
| 31 | 1447 | 12 | Level 3 |
| 32 | 1453 | 13 | Level 3 |
| 33 | 1459 | 13 | Level 3 |
| 34 | 1466 | 14 | Level 3 |
| 35 | 1474 | 15 | Level 3 |
| 36 | 1482 | 15 | Level 4 |
| 37 | 1492 | 17 | Level 4 |
| 38 | 1503 | 19 | Level 4 |
| 39 | 1518 | 24 | Level 4 |
| 40 | 1541 | 33 | Level 4 |
| 41 | 1587 | 60 | Level 4 |
| 42 | 1700 | 153 | Level 4 |

Table 7.B.2 Raw-to-Scale-Score Conversion Table—Written Language, Kindergarten

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Scale Score** | **CSEM** | **Level** |
| 0 | 1150 | 96 | Level 1 |
| 1 | 1217 | 45 | Level 1 |
| 2 | 1251 | 29 | Level 1 |
| 3 | 1270 | 22 | Level 1 |
| 4 | 1284 | 18 | Level 1 |
| 5 | 1295 | 16 | Level 1 |
| 6 | 1304 | 15 | Level 1 |
| 7 | 1312 | 14 | Level 1 |
| 8 | 1320 | 13 | Level 1 |
| 9 | 1327 | 12 | Level 1 |
| 10 | 1334 | 11 | Level 1 |
| 11 | 1340 | 11 | Level 1 |
| 12 | 1345 | 10 | Level 1 |
| 13 | 1350 | 9 | Level 2 |
| 14 | 1354 | 9 | Level 2 |
| 15 | 1359 | 8 | Level 2 |
| 16 | 1363 | 8 | Level 2 |
| 17 | 1367 | 8 | Level 2 |
| 18 | 1371 | 8 | Level 2 |
| 19 | 1375 | 8 | Level 2 |
| 20 | 1379 | 8 | Level 2 |
| 21 | 1383 | 8 | Level 2 |
| 22 | 1388 | 9 | Level 2 |
| 23 | 1393 | 10 | Level 2 |
| 24 | 1399 | 10 | Level 2 |
| 25 | 1406 | 12 | Level 2 |
| 26 | 1415 | 14 | Level 3 |
| 27 | 1428 | 18 | Level 3 |
| 28 | 1451 | 31 | Level 3 |
| 29 | 1700 | 653 | Level 4 |

Table 7.B.3 Raw-to-Scale-Score Conversion Table—Oral Language, Grade One

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Scale Score** | **CSEM** | **Level** |
| 0 | 1150 | 127 | Level 1 |
| 1 | 1227 | 58 | Level 1 |
| 2 | 1270 | 33 | Level 1 |
| 3 | 1292 | 25 | Level 1 |
| 4 | 1307 | 20 | Level 1 |
| 5 | 1318 | 18 | Level 1 |
| 6 | 1327 | 16 | Level 1 |
| 7 | 1335 | 15 | Level 1 |
| 8 | 1342 | 14 | Level 1 |
| 9 | 1348 | 13 | Level 1 |
| 10 | 1354 | 13 | Level 1 |
| 11 | 1359 | 12 | Level 1 |
| 12 | 1364 | 12 | Level 1 |
| 13 | 1369 | 11 | Level 1 |
| 14 | 1373 | 11 | Level 1 |
| 15 | 1377 | 11 | Level 1 |
| 16 | 1382 | 11 | Level 1 |
| 17 | 1386 | 11 | Level 1 |
| 18 | 1390 | 10 | Level 1 |
| 19 | 1393 | 10 | Level 1 |
| 20 | 1397 | 10 | Level 1 |
| 21 | 1401 | 10 | Level 1 |
| 22 | 1405 | 10 | Level 1 |
| 23 | 1409 | 11 | Level 2 |
| 24 | 1413 | 11 | Level 2 |
| 25 | 1417 | 11 | Level 2 |
| 26 | 1421 | 11 | Level 2 |
| 27 | 1425 | 11 | Level 2 |
| 28 | 1430 | 12 | Level 2 |
| 29 | 1435 | 12 | Level 2 |
| 30 | 1440 | 13 | Level 2 |
| 31 | 1446 | 13 | Level 2 |
| 32 | 1452 | 14 | Level 3 |
| 33 | 1459 | 15 | Level 3 |
| 34 | 1466 | 15 | Level 3 |
| 35 | 1474 | 16 | Level 3 |
| 36 | 1482 | 17 | Level 3 |
| 37 | 1491 | 18 | Level 3 |
| 38 | 1501 | 19 | Level 4 |
| 39 | 1513 | 20 | Level 4 |
| 40 | 1526 | 22 | Level 4 |
| 41 | 1542 | 25 | Level 4 |
| 42 | 1564 | 31 | Level 4 |
| 43 | 1602 | 50 | Level 4 |
| 44 | 1700 | 145 | Level 4 |

Table 7.B.4 Raw-to-Scale-Score Conversion Table—Written Language, Grade One

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Scale Score** | **CSEM** | **Level** |
| 0 | 1150 | 426 | Level 1 |
| 1 | 1310 | 30 | Level 1 |
| 2 | 1332 | 21 | Level 1 |
| 3 | 1346 | 17 | Level 1 |
| 4 | 1356 | 15 | Level 1 |
| 5 | 1363 | 14 | Level 1 |
| 6 | 1370 | 12 | Level 1 |
| 7 | 1375 | 12 | Level 1 |
| 8 | 1380 | 11 | Level 1 |
| 9 | 1385 | 11 | Level 1 |
| 10 | 1389 | 10 | Level 1 |
| 11 | 1393 | 10 | Level 1 |
| 12 | 1397 | 10 | Level 1 |
| 13 | 1400 | 10 | Level 1 |
| 14 | 1404 | 9 | Level 1 |
| 15 | 1407 | 9 | Level 1 |
| 16 | 1411 | 9 | Level 1 |
| 17 | 1414 | 9 | Level 2 |
| 18 | 1417 | 9 | Level 2 |
| 19 | 1420 | 9 | Level 2 |
| 20 | 1423 | 9 | Level 2 |
| 21 | 1427 | 9 | Level 2 |
| 22 | 1430 | 9 | Level 2 |
| 23 | 1434 | 9 | Level 2 |
| 24 | 1437 | 10 | Level 2 |
| 25 | 1441 | 10 | Level 2 |
| 26 | 1445 | 10 | Level 2 |
| 27 | 1449 | 10 | Level 2 |
| 28 | 1453 | 11 | Level 2 |
| 29 | 1457 | 11 | Level 2 |
| 30 | 1462 | 11 | Level 3 |
| 31 | 1467 | 12 | Level 3 |
| 32 | 1473 | 12 | Level 3 |
| 33 | 1480 | 13 | Level 3 |
| 34 | 1487 | 14 | Level 3 |
| 35 | 1496 | 16 | Level 3 |
| 36 | 1509 | 20 | Level 3 |
| 37 | 1530 | 29 | Level 4 |
| 38 | 1700 | 462 | Level 4 |

Table 7.B.5 Raw-to-Scale-Score Conversion Table—Oral Language, Grade Two

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Scale Score** | **CSEM** | **Level** |
| 0 | 1150 | 138 | Level 1 |
| 1 | 1244 | 50 | Level 1 |
| 2 | 1281 | 31 | Level 1 |
| 3 | 1301 | 24 | Level 1 |
| 4 | 1315 | 20 | Level 1 |
| 5 | 1325 | 18 | Level 1 |
| 6 | 1334 | 16 | Level 1 |
| 7 | 1341 | 15 | Level 1 |
| 8 | 1347 | 14 | Level 1 |
| 9 | 1353 | 13 | Level 1 |
| 10 | 1358 | 13 | Level 1 |
| 11 | 1363 | 12 | Level 1 |
| 12 | 1367 | 12 | Level 1 |
| 13 | 1371 | 11 | Level 1 |
| 14 | 1375 | 11 | Level 1 |
| 15 | 1379 | 11 | Level 1 |
| 16 | 1382 | 11 | Level 1 |
| 17 | 1386 | 10 | Level 1 |
| 18 | 1389 | 10 | Level 1 |
| 19 | 1393 | 10 | Level 1 |
| 20 | 1396 | 10 | Level 1 |
| 21 | 1399 | 10 | Level 1 |
| 22 | 1402 | 10 | Level 1 |
| 23 | 1406 | 10 | Level 1 |
| 24 | 1409 | 10 | Level 1 |
| 25 | 1412 | 10 | Level 1 |
| 26 | 1416 | 11 | Level 2 |
| 27 | 1419 | 11 | Level 2 |
| 28 | 1423 | 11 | Level 2 |
| 29 | 1426 | 11 | Level 2 |
| 30 | 1430 | 12 | Level 2 |
| 31 | 1434 | 12 | Level 2 |
| 32 | 1438 | 12 | Level 2 |
| 33 | 1443 | 13 | Level 2 |
| 34 | 1447 | 13 | Level 2 |
| 35 | 1452 | 13 | Level 2 |
| 36 | 1458 | 14 | Level 2 |
| 37 | 1463 | 15 | Level 3 |
| 38 | 1469 | 15 | Level 3 |
| 39 | 1476 | 16 | Level 3 |
| 40 | 1483 | 16 | Level 3 |
| 41 | 1491 | 17 | Level 3 |
| 42 | 1499 | 18 | Level 3 |
| 43 | 1508 | 19 | Level 3 |
| 44 | 1519 | 20 | Level 4 |
| 45 | 1530 | 21 | Level 4 |
| 46 | 1544 | 24 | Level 4 |
| 47 | 1561 | 27 | Level 4 |
| 48 | 1584 | 34 | Level 4 |
| 49 | 1626 | 56 | Level 4 |
| 50 | 1700 | 118 | Level 4 |

Table 7.B.6 Raw-to-Scale-Score Conversion Table—Written Language, Grade Two

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Scale Score** | **CSEM** | **Level** |
| 0 | 1150 | 258 | Level 1 |
| 1 | 1306 | 41 | Level 1 |
| 2 | 1336 | 26 | Level 1 |
| 3 | 1353 | 20 | Level 1 |
| 4 | 1364 | 17 | Level 1 |
| 5 | 1373 | 15 | Level 1 |
| 6 | 1380 | 13 | Level 1 |
| 7 | 1386 | 12 | Level 1 |
| 8 | 1391 | 11 | Level 1 |
| 9 | 1396 | 11 | Level 1 |
| 10 | 1400 | 10 | Level 1 |
| 11 | 1404 | 10 | Level 1 |
| 12 | 1407 | 10 | Level 1 |
| 13 | 1411 | 9 | Level 1 |
| 14 | 1414 | 9 | Level 1 |
| 15 | 1417 | 9 | Level 1 |
| 16 | 1421 | 9 | Level 1 |
| 17 | 1424 | 9 | Level 1 |
| 18 | 1427 | 9 | Level 1 |
| 19 | 1430 | 9 | Level 1 |
| 20 | 1432 | 9 | Level 1 |
| 21 | 1435 | 9 | Level 2 |
| 22 | 1438 | 9 | Level 2 |
| 23 | 1442 | 9 | Level 2 |
| 24 | 1445 | 9 | Level 2 |
| 25 | 1448 | 9 | Level 2 |
| 26 | 1451 | 9 | Level 2 |
| 27 | 1455 | 10 | Level 2 |
| 28 | 1458 | 10 | Level 2 |
| 29 | 1462 | 10 | Level 2 |
| 30 | 1466 | 11 | Level 2 |
| 31 | 1470 | 11 | Level 2 |
| 32 | 1475 | 11 | Level 2 |
| 33 | 1480 | 12 | Level 2 |
| 34 | 1485 | 13 | Level 3 |
| 35 | 1491 | 13 | Level 3 |
| 36 | 1497 | 14 | Level 3 |
| 37 | 1505 | 15 | Level 3 |
| 38 | 1513 | 16 | Level 3 |
| 39 | 1523 | 19 | Level 3 |
| 40 | 1536 | 22 | Level 3 |
| 41 | 1555 | 29 | Level 4 |
| 42 | 1593 | 50 | Level 4 |
| 43 | 1700 | 166 | Level 4 |

Table 7.B.7 Raw-to-Scale-Score Conversion Table—Oral Language, Grade Three

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Scale Score** | **CSEM** | **Level** |
| 0 | 1150 | 104 | Level 1 |
| 1 | 1194 | 74 | Level 1 |
| 2 | 1249 | 46 | Level 1 |
| 3 | 1278 | 35 | Level 1 |
| 4 | 1299 | 29 | Level 1 |
| 5 | 1314 | 25 | Level 1 |
| 6 | 1326 | 22 | Level 1 |
| 7 | 1336 | 20 | Level 1 |
| 8 | 1344 | 18 | Level 1 |
| 9 | 1352 | 17 | Level 1 |
| 10 | 1359 | 15 | Level 1 |
| 11 | 1365 | 15 | Level 1 |
| 12 | 1370 | 14 | Level 1 |
| 13 | 1375 | 13 | Level 1 |
| 14 | 1380 | 13 | Level 1 |
| 15 | 1384 | 12 | Level 1 |
| 16 | 1388 | 12 | Level 1 |
| 17 | 1392 | 12 | Level 1 |
| 18 | 1396 | 11 | Level 1 |
| 19 | 1400 | 11 | Level 1 |
| 20 | 1404 | 11 | Level 1 |
| 21 | 1407 | 11 | Level 1 |
| 22 | 1411 | 11 | Level 1 |
| 23 | 1414 | 11 | Level 1 |
| 24 | 1418 | 11 | Level 1 |
| 25 | 1421 | 11 | Level 1 |
| 26 | 1425 | 11 | Level 1 |
| 27 | 1429 | 11 | Level 1 |
| 28 | 1433 | 12 | Level 1 |
| 29 | 1436 | 12 | Level 2 |
| 30 | 1441 | 12 | Level 2 |
| 31 | 1445 | 12 | Level 2 |
| 32 | 1449 | 12 | Level 2 |
| 33 | 1453 | 13 | Level 2 |
| 34 | 1458 | 13 | Level 2 |
| 35 | 1463 | 13 | Level 2 |
| 36 | 1468 | 14 | Level 3 |
| 37 | 1474 | 14 | Level 3 |
| 38 | 1479 | 15 | Level 3 |
| 39 | 1485 | 15 | Level 3 |
| 40 | 1492 | 15 | Level 3 |
| 41 | 1499 | 16 | Level 3 |
| 42 | 1506 | 17 | Level 3 |
| 43 | 1514 | 17 | Level 4 |
| 44 | 1523 | 18 | Level 4 |
| 45 | 1532 | 19 | Level 4 |
| 46 | 1543 | 20 | Level 4 |
| 47 | 1555 | 22 | Level 4 |
| 48 | 1571 | 26 | Level 4 |
| 49 | 1591 | 32 | Level 4 |
| 50 | 1626 | 50 | Level 4 |
| 51 | 1701 | 102 | Level 4 |
| 52 | 1800 | 176 | Level 4 |

Table 7.B.8 Raw-to-Scale-Score Conversion Table—Written Language, Grade Three

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Scale Score** | **CSEM** | **Level** |
| 0 | 1150 | 272 | Level 1 |
| 1 | 1322 | 53 | Level 1 |
| 2 | 1362 | 30 | Level 1 |
| 3 | 1381 | 23 | Level 1 |
| 4 | 1394 | 19 | Level 1 |
| 5 | 1405 | 17 | Level 1 |
| 6 | 1413 | 15 | Level 1 |
| 7 | 1420 | 14 | Level 1 |
| 8 | 1427 | 14 | Level 1 |
| 9 | 1433 | 13 | Level 1 |
| 10 | 1438 | 13 | Level 1 |
| 11 | 1444 | 13 | Level 1 |
| 12 | 1449 | 12 | Level 1 |
| 13 | 1454 | 12 | Level 1 |
| 14 | 1459 | 12 | Level 1 |
| 15 | 1463 | 12 | Level 2 |
| 16 | 1468 | 12 | Level 2 |
| 17 | 1472 | 12 | Level 2 |
| 18 | 1477 | 12 | Level 2 |
| 19 | 1482 | 12 | Level 2 |
| 20 | 1486 | 12 | Level 2 |
| 21 | 1491 | 12 | Level 2 |
| 22 | 1496 | 12 | Level 2 |
| 23 | 1500 | 12 | Level 2 |
| 24 | 1505 | 13 | Level 2 |
| 25 | 1510 | 13 | Level 3 |
| 26 | 1516 | 13 | Level 3 |
| 27 | 1521 | 14 | Level 3 |
| 28 | 1527 | 14 | Level 3 |
| 29 | 1533 | 15 | Level 3 |
| 30 | 1540 | 16 | Level 3 |
| 31 | 1547 | 16 | Level 3 |
| 32 | 1555 | 17 | Level 3 |
| 33 | 1564 | 18 | Level 4 |
| 34 | 1573 | 19 | Level 4 |
| 35 | 1583 | 20 | Level 4 |
| 36 | 1595 | 21 | Level 4 |
| 37 | 1608 | 23 | Level 4 |
| 38 | 1622 | 25 | Level 4 |
| 39 | 1641 | 30 | Level 4 |
| 40 | 1667 | 40 | Level 4 |
| 41 | 1709 | 61 | Level 4 |
| 42 | 1799 | 114 | Level 4 |
| 43 | 1800 | 115 | Level 4 |

Table 7.B.9 Raw-to-Scale-Score Conversion Table—Oral Language, Grade Four

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Scale Score** | **CSEM** | **Level** |
| 0 | 1150 | 104 | Level 1 |
| 1 | 1194 | 74 | Level 1 |
| 2 | 1249 | 46 | Level 1 |
| 3 | 1278 | 35 | Level 1 |
| 4 | 1299 | 29 | Level 1 |
| 5 | 1314 | 25 | Level 1 |
| 6 | 1326 | 22 | Level 1 |
| 7 | 1336 | 20 | Level 1 |
| 8 | 1344 | 18 | Level 1 |
| 9 | 1352 | 17 | Level 1 |
| 10 | 1359 | 15 | Level 1 |
| 11 | 1365 | 15 | Level 1 |
| 12 | 1370 | 14 | Level 1 |
| 13 | 1375 | 13 | Level 1 |
| 14 | 1380 | 13 | Level 1 |
| 15 | 1384 | 12 | Level 1 |
| 16 | 1388 | 12 | Level 1 |
| 17 | 1392 | 12 | Level 1 |
| 18 | 1396 | 11 | Level 1 |
| 19 | 1400 | 11 | Level 1 |
| 20 | 1404 | 11 | Level 1 |
| 21 | 1407 | 11 | Level 1 |
| 22 | 1411 | 11 | Level 1 |
| 23 | 1414 | 11 | Level 1 |
| 24 | 1418 | 11 | Level 1 |
| 25 | 1421 | 11 | Level 1 |
| 26 | 1425 | 11 | Level 1 |
| 27 | 1429 | 11 | Level 1 |
| 28 | 1433 | 12 | Level 1 |
| 29 | 1436 | 12 | Level 1 |
| 30 | 1441 | 12 | Level 2 |
| 31 | 1445 | 12 | Level 2 |
| 32 | 1449 | 12 | Level 2 |
| 33 | 1453 | 13 | Level 2 |
| 34 | 1458 | 13 | Level 2 |
| 35 | 1463 | 13 | Level 2 |
| 36 | 1468 | 14 | Level 2 |
| 37 | 1474 | 14 | Level 3 |
| 38 | 1479 | 15 | Level 3 |
| 39 | 1485 | 15 | Level 3 |
| 40 | 1492 | 15 | Level 3 |
| 41 | 1499 | 16 | Level 3 |
| 42 | 1506 | 17 | Level 3 |
| 43 | 1514 | 17 | Level 3 |
| 44 | 1523 | 18 | Level 4 |
| 45 | 1532 | 19 | Level 4 |
| 46 | 1543 | 20 | Level 4 |
| 47 | 1555 | 22 | Level 4 |
| 48 | 1571 | 26 | Level 4 |
| 49 | 1591 | 32 | Level 4 |
| 50 | 1626 | 50 | Level 4 |
| 51 | 1701 | 102 | Level 4 |
| 52 | 1800 | 176 | Level 4 |

Table 7.B.10 Raw-to-Scale-Score Conversion Table—Written Language, Grade Four

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Scale Score** | **CSEM** | **Level** |
| 0 | 1150 | 272 | Level 1 |
| 1 | 1322 | 53 | Level 1 |
| 2 | 1362 | 30 | Level 1 |
| 3 | 1381 | 23 | Level 1 |
| 4 | 1394 | 19 | Level 1 |
| 5 | 1405 | 17 | Level 1 |
| 6 | 1413 | 15 | Level 1 |
| 7 | 1420 | 14 | Level 1 |
| 8 | 1427 | 14 | Level 1 |
| 9 | 1433 | 13 | Level 1 |
| 10 | 1438 | 13 | Level 1 |
| 11 | 1444 | 13 | Level 1 |
| 12 | 1449 | 12 | Level 1 |
| 13 | 1454 | 12 | Level 1 |
| 14 | 1459 | 12 | Level 1 |
| 15 | 1463 | 12 | Level 1 |
| 16 | 1468 | 12 | Level 1 |
| 17 | 1472 | 12 | Level 1 |
| 18 | 1477 | 12 | Level 1 |
| 19 | 1482 | 12 | Level 2 |
| 20 | 1486 | 12 | Level 2 |
| 21 | 1491 | 12 | Level 2 |
| 22 | 1496 | 12 | Level 2 |
| 23 | 1500 | 12 | Level 2 |
| 24 | 1505 | 13 | Level 2 |
| 25 | 1510 | 13 | Level 2 |
| 26 | 1516 | 13 | Level 2 |
| 27 | 1521 | 14 | Level 2 |
| 28 | 1527 | 14 | Level 3 |
| 29 | 1533 | 15 | Level 3 |
| 30 | 1540 | 16 | Level 3 |
| 31 | 1547 | 16 | Level 3 |
| 32 | 1555 | 17 | Level 3 |
| 33 | 1564 | 18 | Level 3 |
| 34 | 1573 | 19 | Level 3 |
| 35 | 1583 | 20 | Level 4 |
| 36 | 1595 | 21 | Level 4 |
| 37 | 1608 | 23 | Level 4 |
| 38 | 1622 | 25 | Level 4 |
| 39 | 1641 | 30 | Level 4 |
| 40 | 1667 | 40 | Level 4 |
| 41 | 1709 | 61 | Level 4 |
| 42 | 1799 | 114 | Level 4 |
| 43 | 1800 | 115 | Level 4 |

Table 7.B.11 Raw-to-Scale-Score Conversion Table—Oral Language, Grade Five

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Scale Score** | **CSEM** | **Level** |
| 0 | 1150 | 104 | Level 1 |
| 1 | 1194 | 74 | Level 1 |
| 2 | 1249 | 46 | Level 1 |
| 3 | 1278 | 35 | Level 1 |
| 4 | 1299 | 29 | Level 1 |
| 5 | 1314 | 25 | Level 1 |
| 6 | 1326 | 22 | Level 1 |
| 7 | 1336 | 20 | Level 1 |
| 8 | 1344 | 18 | Level 1 |
| 9 | 1352 | 17 | Level 1 |
| 10 | 1359 | 15 | Level 1 |
| 11 | 1365 | 15 | Level 1 |
| 12 | 1370 | 14 | Level 1 |
| 13 | 1375 | 13 | Level 1 |
| 14 | 1380 | 13 | Level 1 |
| 15 | 1384 | 12 | Level 1 |
| 16 | 1388 | 12 | Level 1 |
| 17 | 1392 | 12 | Level 1 |
| 18 | 1396 | 11 | Level 1 |
| 19 | 1400 | 11 | Level 1 |
| 20 | 1404 | 11 | Level 1 |
| 21 | 1407 | 11 | Level 1 |
| 22 | 1411 | 11 | Level 1 |
| 23 | 1414 | 11 | Level 1 |
| 24 | 1418 | 11 | Level 1 |
| 25 | 1421 | 11 | Level 1 |
| 26 | 1425 | 11 | Level 1 |
| 27 | 1429 | 11 | Level 1 |
| 28 | 1433 | 12 | Level 1 |
| 29 | 1436 | 12 | Level 1 |
| 30 | 1441 | 12 | Level 1 |
| 31 | 1445 | 12 | Level 1 |
| 32 | 1449 | 12 | Level 2 |
| 33 | 1453 | 13 | Level 2 |
| 34 | 1458 | 13 | Level 2 |
| 35 | 1463 | 13 | Level 2 |
| 36 | 1468 | 14 | Level 2 |
| 37 | 1474 | 14 | Level 2 |
| 38 | 1479 | 15 | Level 3 |
| 39 | 1485 | 15 | Level 3 |
| 40 | 1492 | 15 | Level 3 |
| 41 | 1499 | 16 | Level 3 |
| 42 | 1506 | 17 | Level 3 |
| 43 | 1514 | 17 | Level 3 |
| 44 | 1523 | 18 | Level 3 |
| 45 | 1532 | 19 | Level 3 |
| 46 | 1543 | 20 | Level 4 |
| 47 | 1555 | 22 | Level 4 |
| 48 | 1571 | 26 | Level 4 |
| 49 | 1591 | 32 | Level 4 |
| 50 | 1626 | 50 | Level 4 |
| 51 | 1701 | 102 | Level 4 |
| 52 | 1800 | 176 | Level 4 |

Table 7.B.12 Raw-to-Scale-Score Conversion Table—Written Language, Grade Five

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Scale Score** | **CSEM** | **Level** |
| 0 | 1150 | 272 | Level 1 |
| 1 | 1322 | 53 | Level 1 |
| 2 | 1362 | 30 | Level 1 |
| 3 | 1381 | 23 | Level 1 |
| 4 | 1394 | 19 | Level 1 |
| 5 | 1405 | 17 | Level 1 |
| 6 | 1413 | 15 | Level 1 |
| 7 | 1420 | 14 | Level 1 |
| 8 | 1427 | 14 | Level 1 |
| 9 | 1433 | 13 | Level 1 |
| 10 | 1438 | 13 | Level 1 |
| 11 | 1444 | 13 | Level 1 |
| 12 | 1449 | 12 | Level 1 |
| 13 | 1454 | 12 | Level 1 |
| 14 | 1459 | 12 | Level 1 |
| 15 | 1463 | 12 | Level 1 |
| 16 | 1468 | 12 | Level 1 |
| 17 | 1472 | 12 | Level 1 |
| 18 | 1477 | 12 | Level 1 |
| 19 | 1482 | 12 | Level 1 |
| 20 | 1486 | 12 | Level 1 |
| 21 | 1491 | 12 | Level 2 |
| 22 | 1496 | 12 | Level 2 |
| 23 | 1500 | 12 | Level 2 |
| 24 | 1505 | 13 | Level 2 |
| 25 | 1510 | 13 | Level 2 |
| 26 | 1516 | 13 | Level 2 |
| 27 | 1521 | 14 | Level 2 |
| 28 | 1527 | 14 | Level 2 |
| 29 | 1533 | 15 | Level 2 |
| 30 | 1540 | 16 | Level 2 |
| 31 | 1547 | 16 | Level 2 |
| 32 | 1555 | 17 | Level 3 |
| 33 | 1564 | 18 | Level 3 |
| 34 | 1573 | 19 | Level 3 |
| 35 | 1583 | 20 | Level 3 |
| 36 | 1595 | 21 | Level 4 |
| 37 | 1608 | 23 | Level 4 |
| 38 | 1622 | 25 | Level 4 |
| 39 | 1641 | 30 | Level 4 |
| 40 | 1667 | 40 | Level 4 |
| 41 | 1709 | 61 | Level 4 |
| 42 | 1799 | 114 | Level 4 |
| 43 | 1800 | 115 | Level 4 |

Table 7.B.13 Raw-to-Scale-Score Conversion Table—Oral Language, Grade Six

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Scale Score** | **CSEM** | **Level** |
| 0 | 1150 | 97 | Level 1 |
| 1 | 1162 | 90 | Level 1 |
| 2 | 1229 | 57 | Level 1 |
| 3 | 1266 | 43 | Level 1 |
| 4 | 1291 | 35 | Level 1 |
| 5 | 1310 | 30 | Level 1 |
| 6 | 1325 | 26 | Level 1 |
| 7 | 1338 | 23 | Level 1 |
| 8 | 1348 | 21 | Level 1 |
| 9 | 1357 | 19 | Level 1 |
| 10 | 1365 | 18 | Level 1 |
| 11 | 1372 | 16 | Level 1 |
| 12 | 1378 | 15 | Level 1 |
| 13 | 1384 | 15 | Level 1 |
| 14 | 1389 | 14 | Level 1 |
| 15 | 1394 | 14 | Level 1 |
| 16 | 1399 | 13 | Level 1 |
| 17 | 1403 | 13 | Level 1 |
| 18 | 1408 | 13 | Level 1 |
| 19 | 1412 | 13 | Level 1 |
| 20 | 1416 | 13 | Level 1 |
| 21 | 1421 | 13 | Level 1 |
| 22 | 1425 | 13 | Level 1 |
| 23 | 1429 | 13 | Level 1 |
| 24 | 1433 | 13 | Level 1 |
| 25 | 1437 | 13 | Level 1 |
| 26 | 1442 | 13 | Level 1 |
| 27 | 1446 | 13 | Level 1 |
| 28 | 1451 | 13 | Level 2 |
| 29 | 1455 | 14 | Level 2 |
| 30 | 1460 | 14 | Level 2 |
| 31 | 1465 | 14 | Level 2 |
| 32 | 1470 | 14 | Level 2 |
| 33 | 1475 | 15 | Level 2 |
| 34 | 1480 | 15 | Level 2 |
| 35 | 1486 | 15 | Level 3 |
| 36 | 1492 | 16 | Level 3 |
| 37 | 1498 | 16 | Level 3 |
| 38 | 1504 | 17 | Level 3 |
| 39 | 1511 | 17 | Level 3 |
| 40 | 1518 | 18 | Level 3 |
| 41 | 1526 | 18 | Level 3 |
| 42 | 1534 | 19 | Level 3 |
| 43 | 1542 | 20 | Level 4 |
| 44 | 1552 | 21 | Level 4 |
| 45 | 1562 | 22 | Level 4 |
| 46 | 1574 | 24 | Level 4 |
| 47 | 1588 | 26 | Level 4 |
| 48 | 1605 | 30 | Level 4 |
| 49 | 1628 | 37 | Level 4 |
| 50 | 1663 | 51 | Level 4 |
| 51 | 1733 | 94 | Level 4 |
| 52 | 1900 | 252 | Level 4 |

Table 7.B.14 Raw-to-Scale-Score Conversion Table—Written Language, Grade Six

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Scale Score** | **CSEM** | **Level** |
| 0 | 1150 | 269 | Level 1 |
| 1 | 1323 | 52 | Level 1 |
| 2 | 1361 | 35 | Level 1 |
| 3 | 1383 | 28 | Level 1 |
| 4 | 1398 | 24 | Level 1 |
| 5 | 1411 | 21 | Level 1 |
| 6 | 1421 | 19 | Level 1 |
| 7 | 1429 | 18 | Level 1 |
| 8 | 1437 | 17 | Level 1 |
| 9 | 1444 | 16 | Level 1 |
| 10 | 1450 | 16 | Level 1 |
| 11 | 1456 | 15 | Level 1 |
| 12 | 1462 | 15 | Level 1 |
| 13 | 1467 | 15 | Level 1 |
| 14 | 1473 | 14 | Level 1 |
| 15 | 1478 | 14 | Level 1 |
| 16 | 1483 | 14 | Level 1 |
| 17 | 1488 | 14 | Level 1 |
| 18 | 1493 | 14 | Level 1 |
| 19 | 1498 | 14 | Level 1 |
| 20 | 1503 | 14 | Level 2 |
| 21 | 1508 | 14 | Level 2 |
| 22 | 1513 | 14 | Level 2 |
| 23 | 1518 | 14 | Level 2 |
| 24 | 1523 | 15 | Level 2 |
| 25 | 1529 | 15 | Level 2 |
| 26 | 1534 | 15 | Level 2 |
| 27 | 1540 | 15 | Level 2 |
| 28 | 1545 | 16 | Level 2 |
| 29 | 1552 | 16 | Level 3 |
| 30 | 1558 | 17 | Level 3 |
| 31 | 1565 | 17 | Level 3 |
| 32 | 1572 | 18 | Level 3 |
| 33 | 1580 | 19 | Level 3 |
| 34 | 1588 | 19 | Level 3 |
| 35 | 1597 | 20 | Level 4 |
| 36 | 1607 | 21 | Level 4 |
| 37 | 1618 | 23 | Level 4 |
| 38 | 1631 | 24 | Level 4 |
| 39 | 1646 | 27 | Level 4 |
| 40 | 1664 | 31 | Level 4 |
| 41 | 1692 | 41 | Level 4 |
| 42 | 1743 | 68 | Level 4 |
| 43 | 1900 | 218 | Level 4 |

Table 7.B.15 Raw-to-Scale-Score Conversion Table—Oral Language, Grade Seven

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Scale Score** | **CSEM** | **Level** |
| 0 | 1150 | 97 | Level 1 |
| 1 | 1162 | 90 | Level 1 |
| 2 | 1229 | 57 | Level 1 |
| 3 | 1266 | 43 | Level 1 |
| 4 | 1291 | 35 | Level 1 |
| 5 | 1310 | 30 | Level 1 |
| 6 | 1325 | 26 | Level 1 |
| 7 | 1338 | 23 | Level 1 |
| 8 | 1348 | 21 | Level 1 |
| 9 | 1357 | 19 | Level 1 |
| 10 | 1365 | 18 | Level 1 |
| 11 | 1372 | 16 | Level 1 |
| 12 | 1378 | 15 | Level 1 |
| 13 | 1384 | 15 | Level 1 |
| 14 | 1389 | 14 | Level 1 |
| 15 | 1394 | 14 | Level 1 |
| 16 | 1399 | 13 | Level 1 |
| 17 | 1403 | 13 | Level 1 |
| 18 | 1408 | 13 | Level 1 |
| 19 | 1412 | 13 | Level 1 |
| 20 | 1416 | 13 | Level 1 |
| 21 | 1421 | 13 | Level 1 |
| 22 | 1425 | 13 | Level 1 |
| 23 | 1429 | 13 | Level 1 |
| 24 | 1433 | 13 | Level 1 |
| 25 | 1437 | 13 | Level 1 |
| 26 | 1442 | 13 | Level 1 |
| 27 | 1446 | 13 | Level 1 |
| 28 | 1451 | 13 | Level 1 |
| 29 | 1455 | 14 | Level 1 |
| 30 | 1460 | 14 | Level 2 |
| 31 | 1465 | 14 | Level 2 |
| 32 | 1470 | 14 | Level 2 |
| 33 | 1475 | 15 | Level 2 |
| 34 | 1480 | 15 | Level 2 |
| 35 | 1486 | 15 | Level 2 |
| 36 | 1492 | 16 | Level 2 |
| 37 | 1498 | 16 | Level 3 |
| 38 | 1504 | 17 | Level 3 |
| 39 | 1511 | 17 | Level 3 |
| 40 | 1518 | 18 | Level 3 |
| 41 | 1526 | 18 | Level 3 |
| 42 | 1534 | 19 | Level 3 |
| 43 | 1542 | 20 | Level 3 |
| 44 | 1552 | 21 | Level 3 |
| 45 | 1562 | 22 | Level 4 |
| 46 | 1574 | 24 | Level 4 |
| 47 | 1588 | 26 | Level 4 |
| 48 | 1605 | 30 | Level 4 |
| 49 | 1628 | 37 | Level 4 |
| 50 | 1663 | 51 | Level 4 |
| 51 | 1733 | 94 | Level 4 |
| 52 | 1900 | 252 | Level 4 |

Table 7.B.16 Raw-to-Scale-Score Conversion Table—Written Language, Grade Seven

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Scale Score** | **CSEM** | **Level** |
| 0 | 1150 | 269 | Level 1 |
| 1 | 1323 | 52 | Level 1 |
| 2 | 1361 | 35 | Level 1 |
| 3 | 1383 | 28 | Level 1 |
| 4 | 1398 | 24 | Level 1 |
| 5 | 1411 | 21 | Level 1 |
| 6 | 1421 | 19 | Level 1 |
| 7 | 1429 | 18 | Level 1 |
| 8 | 1437 | 17 | Level 1 |
| 9 | 1444 | 16 | Level 1 |
| 10 | 1450 | 16 | Level 1 |
| 11 | 1456 | 15 | Level 1 |
| 12 | 1462 | 15 | Level 1 |
| 13 | 1467 | 15 | Level 1 |
| 14 | 1473 | 14 | Level 1 |
| 15 | 1478 | 14 | Level 1 |
| 16 | 1483 | 14 | Level 1 |
| 17 | 1488 | 14 | Level 1 |
| 18 | 1493 | 14 | Level 1 |
| 19 | 1498 | 14 | Level 1 |
| 20 | 1503 | 14 | Level 1 |
| 21 | 1508 | 14 | Level 2 |
| 22 | 1513 | 14 | Level 2 |
| 23 | 1518 | 14 | Level 2 |
| 24 | 1523 | 15 | Level 2 |
| 25 | 1529 | 15 | Level 2 |
| 26 | 1534 | 15 | Level 2 |
| 27 | 1540 | 15 | Level 2 |
| 28 | 1545 | 16 | Level 2 |
| 29 | 1552 | 16 | Level 2 |
| 30 | 1558 | 17 | Level 3 |
| 31 | 1565 | 17 | Level 3 |
| 32 | 1572 | 18 | Level 3 |
| 33 | 1580 | 19 | Level 3 |
| 34 | 1588 | 19 | Level 3 |
| 35 | 1597 | 20 | Level 3 |
| 36 | 1607 | 21 | Level 4 |
| 37 | 1618 | 23 | Level 4 |
| 38 | 1631 | 24 | Level 4 |
| 39 | 1646 | 27 | Level 4 |
| 40 | 1664 | 31 | Level 4 |
| 41 | 1692 | 41 | Level 4 |
| 42 | 1743 | 68 | Level 4 |
| 43 | 1900 | 218 | Level 4 |

Table 7.B.17 Raw-to-Scale-Score Conversion Table—Oral Language, Grade Eight

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Scale Score** | **CSEM** | **Level** |
| 0 | 1150 | 97 | Level 1 |
| 1 | 1162 | 90 | Level 1 |
| 2 | 1229 | 57 | Level 1 |
| 3 | 1266 | 43 | Level 1 |
| 4 | 1291 | 35 | Level 1 |
| 5 | 1310 | 30 | Level 1 |
| 6 | 1325 | 26 | Level 1 |
| 7 | 1338 | 23 | Level 1 |
| 8 | 1348 | 21 | Level 1 |
| 9 | 1357 | 19 | Level 1 |
| 10 | 1365 | 18 | Level 1 |
| 11 | 1372 | 16 | Level 1 |
| 12 | 1378 | 15 | Level 1 |
| 13 | 1384 | 15 | Level 1 |
| 14 | 1389 | 14 | Level 1 |
| 15 | 1394 | 14 | Level 1 |
| 16 | 1399 | 13 | Level 1 |
| 17 | 1403 | 13 | Level 1 |
| 18 | 1408 | 13 | Level 1 |
| 19 | 1412 | 13 | Level 1 |
| 20 | 1416 | 13 | Level 1 |
| 21 | 1421 | 13 | Level 1 |
| 22 | 1425 | 13 | Level 1 |
| 23 | 1429 | 13 | Level 1 |
| 24 | 1433 | 13 | Level 1 |
| 25 | 1437 | 13 | Level 1 |
| 26 | 1442 | 13 | Level 1 |
| 27 | 1446 | 13 | Level 1 |
| 28 | 1451 | 13 | Level 1 |
| 29 | 1455 | 14 | Level 1 |
| 30 | 1460 | 14 | Level 1 |
| 31 | 1465 | 14 | Level 2 |
| 32 | 1470 | 14 | Level 2 |
| 33 | 1475 | 15 | Level 2 |
| 34 | 1480 | 15 | Level 2 |
| 35 | 1486 | 15 | Level 2 |
| 36 | 1492 | 16 | Level 2 |
| 37 | 1498 | 16 | Level 2 |
| 38 | 1504 | 17 | Level 2 |
| 39 | 1511 | 17 | Level 3 |
| 40 | 1518 | 18 | Level 3 |
| 41 | 1526 | 18 | Level 3 |
| 42 | 1534 | 19 | Level 3 |
| 43 | 1542 | 20 | Level 3 |
| 44 | 1552 | 21 | Level 3 |
| 45 | 1562 | 22 | Level 3 |
| 46 | 1574 | 24 | Level 4 |
| 47 | 1588 | 26 | Level 4 |
| 48 | 1605 | 30 | Level 4 |
| 49 | 1628 | 37 | Level 4 |
| 50 | 1663 | 51 | Level 4 |
| 51 | 1733 | 94 | Level 4 |
| 52 | 1900 | 252 | Level 4 |

Table 7.B.18 Raw-to-Scale-Score Conversion Table—Written Language, Grade Eight

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Scale Score** | **CSEM** | **Level** |
| 0 | 1150 | 269 | Level 1 |
| 1 | 1323 | 52 | Level 1 |
| 2 | 1361 | 35 | Level 1 |
| 3 | 1383 | 28 | Level 1 |
| 4 | 1398 | 24 | Level 1 |
| 5 | 1411 | 21 | Level 1 |
| 6 | 1421 | 19 | Level 1 |
| 7 | 1429 | 18 | Level 1 |
| 8 | 1437 | 17 | Level 1 |
| 9 | 1444 | 16 | Level 1 |
| 10 | 1450 | 16 | Level 1 |
| 11 | 1456 | 15 | Level 1 |
| 12 | 1462 | 15 | Level 1 |
| 13 | 1467 | 15 | Level 1 |
| 14 | 1473 | 14 | Level 1 |
| 15 | 1478 | 14 | Level 1 |
| 16 | 1483 | 14 | Level 1 |
| 17 | 1488 | 14 | Level 1 |
| 18 | 1493 | 14 | Level 1 |
| 19 | 1498 | 14 | Level 1 |
| 20 | 1503 | 14 | Level 1 |
| 21 | 1508 | 14 | Level 1 |
| 22 | 1513 | 14 | Level 2 |
| 23 | 1518 | 14 | Level 2 |
| 24 | 1523 | 15 | Level 2 |
| 25 | 1529 | 15 | Level 2 |
| 26 | 1534 | 15 | Level 2 |
| 27 | 1540 | 15 | Level 2 |
| 28 | 1545 | 16 | Level 2 |
| 29 | 1552 | 16 | Level 2 |
| 30 | 1558 | 17 | Level 2 |
| 31 | 1565 | 17 | Level 3 |
| 32 | 1572 | 18 | Level 3 |
| 33 | 1580 | 19 | Level 3 |
| 34 | 1588 | 19 | Level 3 |
| 35 | 1597 | 20 | Level 3 |
| 36 | 1607 | 21 | Level 3 |
| 37 | 1618 | 23 | Level 4 |
| 38 | 1631 | 24 | Level 4 |
| 39 | 1646 | 27 | Level 4 |
| 40 | 1664 | 31 | Level 4 |
| 41 | 1692 | 41 | Level 4 |
| 42 | 1743 | 68 | Level 4 |
| 43 | 1900 | 218 | Level 4 |

Table 7.B.19 Raw-to-Scale-Score Conversion Table—Oral Language, Grades Nine and Ten

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Scale Score** | **CSEM** | **Level** |
| 0 | 1150 | 86 | Level 1 |
| 1 | 1150 | 86 | Level 1 |
| 2 | 1173 | 77 | Level 1 |
| 3 | 1223 | 58 | Level 1 |
| 4 | 1257 | 46 | Level 1 |
| 5 | 1283 | 38 | Level 1 |
| 6 | 1302 | 33 | Level 1 |
| 7 | 1318 | 28 | Level 1 |
| 8 | 1331 | 25 | Level 1 |
| 9 | 1342 | 23 | Level 1 |
| 10 | 1351 | 21 | Level 1 |
| 11 | 1360 | 19 | Level 1 |
| 12 | 1367 | 18 | Level 1 |
| 13 | 1374 | 17 | Level 1 |
| 14 | 1380 | 17 | Level 1 |
| 15 | 1386 | 16 | Level 1 |
| 16 | 1392 | 15 | Level 1 |
| 17 | 1397 | 15 | Level 1 |
| 18 | 1402 | 15 | Level 1 |
| 19 | 1407 | 14 | Level 1 |
| 20 | 1411 | 14 | Level 1 |
| 21 | 1416 | 14 | Level 1 |
| 22 | 1420 | 14 | Level 1 |
| 23 | 1425 | 14 | Level 1 |
| 24 | 1429 | 14 | Level 1 |
| 25 | 1434 | 14 | Level 1 |
| 26 | 1438 | 14 | Level 1 |
| 27 | 1443 | 14 | Level 1 |
| 28 | 1447 | 14 | Level 1 |
| 29 | 1452 | 14 | Level 1 |
| 30 | 1457 | 15 | Level 1 |
| 31 | 1461 | 15 | Level 1 |
| 32 | 1467 | 15 | Level 2 |
| 33 | 1472 | 16 | Level 2 |
| 34 | 1477 | 16 | Level 2 |
| 35 | 1483 | 16 | Level 2 |
| 36 | 1490 | 17 | Level 2 |
| 37 | 1496 | 17 | Level 2 |
| 38 | 1503 | 18 | Level 2 |
| 39 | 1511 | 19 | Level 2 |
| 40 | 1519 | 20 | Level 3 |
| 41 | 1528 | 21 | Level 3 |
| 42 | 1538 | 23 | Level 3 |
| 43 | 1549 | 24 | Level 3 |
| 44 | 1562 | 26 | Level 3 |
| 45 | 1577 | 29 | Level 3 |
| 46 | 1594 | 32 | Level 4 |
| 47 | 1615 | 37 | Level 4 |
| 48 | 1642 | 45 | Level 4 |
| 49 | 1681 | 62 | Level 4 |
| 50 | 1746 | 96 | Level 4 |
| 51 | 1872 | 164 | Level 4 |
| 52 | 1950 | 213 | Level 4 |

Table 7.B.20 Raw-to-Scale-Score Conversion Table—Written Language, Grades Nine and Ten

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Scale Score** | **CSEM** | **Level** |
| 0 | 1150 | 209 | Level 1 |
| 1 | 1297 | 68 | Level 1 |
| 2 | 1347 | 44 | Level 1 |
| 3 | 1374 | 34 | Level 1 |
| 4 | 1394 | 29 | Level 1 |
| 5 | 1408 | 25 | Level 1 |
| 6 | 1420 | 23 | Level 1 |
| 7 | 1430 | 21 | Level 1 |
| 8 | 1439 | 19 | Level 1 |
| 9 | 1447 | 18 | Level 1 |
| 10 | 1454 | 17 | Level 1 |
| 11 | 1460 | 17 | Level 1 |
| 12 | 1467 | 16 | Level 1 |
| 13 | 1472 | 16 | Level 1 |
| 14 | 1478 | 15 | Level 1 |
| 15 | 1483 | 15 | Level 1 |
| 16 | 1489 | 15 | Level 1 |
| 17 | 1494 | 15 | Level 1 |
| 18 | 1499 | 15 | Level 1 |
| 19 | 1505 | 15 | Level 1 |
| 20 | 1510 | 15 | Level 1 |
| 21 | 1515 | 15 | Level 1 |
| 22 | 1521 | 16 | Level 2 |
| 23 | 1526 | 16 | Level 2 |
| 24 | 1532 | 16 | Level 2 |
| 25 | 1538 | 16 | Level 2 |
| 26 | 1544 | 17 | Level 2 |
| 27 | 1550 | 17 | Level 2 |
| 28 | 1556 | 17 | Level 2 |
| 29 | 1563 | 18 | Level 2 |
| 30 | 1570 | 19 | Level 2 |
| 31 | 1577 | 19 | Level 2 |
| 32 | 1585 | 20 | Level 3 |
| 33 | 1594 | 21 | Level 3 |
| 34 | 1603 | 22 | Level 3 |
| 35 | 1612 | 23 | Level 3 |
| 36 | 1623 | 24 | Level 3 |
| 37 | 1636 | 26 | Level 4 |
| 38 | 1650 | 28 | Level 4 |
| 39 | 1667 | 32 | Level 4 |
| 40 | 1689 | 38 | Level 4 |
| 41 | 1722 | 50 | Level 4 |
| 42 | 1781 | 80 | Level 4 |
| 43 | 1950 | 234 | Level 4 |

Table 7.B.21 Raw-to-Scale-Score Conversion Table—Oral Language, Grades Eleven and Twelve

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Scale Score** | **CSEM** | **Level** |
| 0 | 1150 | 104 | Level 1 |
| 1 | 1150 | 104 | Level 1 |
| 2 | 1222 | 64 | Level 1 |
| 3 | 1263 | 45 | Level 1 |
| 4 | 1290 | 35 | Level 1 |
| 5 | 1309 | 29 | Level 1 |
| 6 | 1323 | 25 | Level 1 |
| 7 | 1335 | 23 | Level 1 |
| 8 | 1346 | 21 | Level 1 |
| 9 | 1354 | 19 | Level 1 |
| 10 | 1362 | 18 | Level 1 |
| 11 | 1369 | 17 | Level 1 |
| 12 | 1376 | 16 | Level 1 |
| 13 | 1382 | 16 | Level 1 |
| 14 | 1388 | 15 | Level 1 |
| 15 | 1393 | 15 | Level 1 |
| 16 | 1399 | 15 | Level 1 |
| 17 | 1404 | 15 | Level 1 |
| 18 | 1409 | 14 | Level 1 |
| 19 | 1414 | 14 | Level 1 |
| 20 | 1418 | 14 | Level 1 |
| 21 | 1423 | 14 | Level 1 |
| 22 | 1428 | 14 | Level 1 |
| 23 | 1432 | 14 | Level 1 |
| 24 | 1437 | 14 | Level 1 |
| 25 | 1441 | 14 | Level 1 |
| 26 | 1446 | 14 | Level 1 |
| 27 | 1451 | 14 | Level 1 |
| 28 | 1455 | 14 | Level 1 |
| 29 | 1460 | 15 | Level 1 |
| 30 | 1465 | 15 | Level 1 |
| 31 | 1470 | 15 | Level 2 |
| 32 | 1476 | 16 | Level 2 |
| 33 | 1481 | 16 | Level 2 |
| 34 | 1487 | 16 | Level 2 |
| 35 | 1493 | 17 | Level 2 |
| 36 | 1499 | 17 | Level 2 |
| 37 | 1506 | 18 | Level 2 |
| 38 | 1513 | 18 | Level 2 |
| 39 | 1520 | 19 | Level 3 |
| 40 | 1528 | 20 | Level 3 |
| 41 | 1537 | 21 | Level 3 |
| 42 | 1546 | 22 | Level 3 |
| 43 | 1557 | 24 | Level 3 |
| 44 | 1568 | 25 | Level 3 |
| 45 | 1582 | 28 | Level 3 |
| 46 | 1597 | 31 | Level 4 |
| 47 | 1616 | 35 | Level 4 |
| 48 | 1640 | 41 | Level 4 |
| 49 | 1672 | 53 | Level 4 |
| 50 | 1723 | 77 | Level 4 |
| 51 | 1822 | 133 | Level 4 |
| 52 | 1950 | 225 | Level 4 |

Table 7.B.22 Raw-to-Scale-Score Conversion Table—Written Language, Grades Eleven and Twelve

|  |  |  |  |
| --- | --- | --- | --- |
| **Raw Score** | **Scale Score** | **CSEM** | **Level** |
| 0 | 1150 | 225 | Level 1 |
| 1 | 1287 | 78 | Level 1 |
| 2 | 1346 | 46 | Level 1 |
| 3 | 1376 | 34 | Level 1 |
| 4 | 1396 | 28 | Level 1 |
| 5 | 1411 | 25 | Level 1 |
| 6 | 1423 | 22 | Level 1 |
| 7 | 1433 | 20 | Level 1 |
| 8 | 1442 | 19 | Level 1 |
| 9 | 1450 | 17 | Level 1 |
| 10 | 1457 | 17 | Level 1 |
| 11 | 1463 | 16 | Level 1 |
| 12 | 1469 | 15 | Level 1 |
| 13 | 1475 | 15 | Level 1 |
| 14 | 1481 | 15 | Level 1 |
| 15 | 1486 | 15 | Level 1 |
| 16 | 1491 | 15 | Level 1 |
| 17 | 1497 | 15 | Level 1 |
| 18 | 1502 | 15 | Level 1 |
| 19 | 1507 | 15 | Level 1 |
| 20 | 1513 | 15 | Level 1 |
| 21 | 1518 | 15 | Level 1 |
| 22 | 1524 | 16 | Level 1 |
| 23 | 1530 | 16 | Level 2 |
| 24 | 1536 | 16 | Level 2 |
| 25 | 1543 | 17 | Level 2 |
| 26 | 1549 | 17 | Level 2 |
| 27 | 1556 | 18 | Level 2 |
| 28 | 1563 | 18 | Level 2 |
| 29 | 1571 | 19 | Level 2 |
| 30 | 1579 | 20 | Level 2 |
| 31 | 1588 | 21 | Level 2 |
| 32 | 1597 | 22 | Level 3 |
| 33 | 1608 | 23 | Level 3 |
| 34 | 1619 | 24 | Level 3 |
| 35 | 1631 | 26 | Level 3 |
| 36 | 1645 | 28 | Level 3 |
| 37 | 1660 | 30 | Level 4 |
| 38 | 1679 | 34 | Level 4 |
| 39 | 1703 | 40 | Level 4 |
| 40 | 1736 | 51 | Level 4 |
| 41 | 1792 | 78 | Level 4 |
| 42 | 1950 | 206 | Level 4 |
| 43 | 1950 | 206 | Level 4 |

### Appendix 7.C: Scale Score Frequency Distributions for the Summative ELPAC

Table 7.C.1 Scale Score Frequency Distribution—Oral Language, Kindergarten

|  |  |  |  |
| --- | --- | --- | --- |
| **Scale Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 1150 | 4,308 | 3.13 | 3.13 |
| 1266 | 1,362 | 0.99 | 4.12 |
| 1293 | 1,277 | 0.93 | 5.04 |
| 1308 | 1,117 | 0.81 | 5.86 |
| 1319 | 1,126 | 0.82 | 6.67 |
| 1328 | 1,173 | 0.85 | 7.52 |
| 1335 | 1,301 | 0.94 | 8.47 |
| 1342 | 1,519 | 1.10 | 9.57 |
| 1348 | 1,584 | 1.15 | 10.72 |
| 1353 | 1,734 | 1.26 | 11.98 |
| 1358 | 1,739 | 1.26 | 13.24 |
| 1363 | 1,799 | 1.31 | 14.55 |
| 1368 | 1,887 | 1.37 | 15.92 |
| 1372 | 1,987 | 1.44 | 17.36 |
| 1376 | 2,147 | 1.56 | 18.92 |
| 1380 | 2,237 | 1.62 | 20.55 |
| 1384 | 2,360 | 1.71 | 22.26 |
| 1388 | 2,609 | 1.89 | 24.15 |
| 1392 | 2,825 | 2.05 | 26.21 |
| 1395 | 2,961 | 2.15 | 28.36 |
| 1399 | 3,197 | 2.32 | 30.68 |
| 1403 | 3,481 | 2.53 | 33.20 |
| 1406 | 3,717 | 2.70 | 35.90 |
| 1410 | 3,825 | 2.78 | 38.68 |
| 1414 | 4,165 | 3.02 | 41.70 |
| 1418 | 4,289 | 3.11 | 44.82 |
| 1422 | 4,565 | 3.31 | 48.13 |
| 1426 | 4,821 | 3.50 | 51.63 |
| 1431 | 4,890 | 3.55 | 55.18 |
| 1436 | 5,128 | 3.72 | 58.91 |
| 1441 | 5,387 | 3.91 | 62.82 |
| 1447 | 5,460 | 3.96 | 66.78 |
| 1453 | 5,653 | 4.10 | 70.89 |
| 1459 | 5,631 | 4.09 | 74.98 |
| 1466 | 5,486 | 3.98 | 78.96 |
| 1474 | 5,370 | 3.90 | 82.86 |
| 1482 | 5,157 | 3.74 | 86.60 |
| 1492 | 4,678 | 3.40 | 90.00 |
| 1503 | 4,210 | 3.06 | 93.06 |
| 1518 | 3,573 | 2.59 | 95.65 |
| 1541 | 2,865 | 2.08 | 97.73 |
| 1587 | 2,108 | 1.53 | 99.26 |
| 1700 | 1,016 | 0.74 | 100.00 |

Table 7.C.2 Scale Score Frequency Distribution—Oral Language, Grade One

|  |  |  |  |
| --- | --- | --- | --- |
| **Scale Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 1150 | 1,613 | 1.61 | 1.61 |
| 1227 | 545 | 0.55 | 2.16 |
| 1270 | 428 | 0.43 | 2.59 |
| 1292 | 300 | 0.30 | 2.89 |
| 1307 | 263 | 0.26 | 3.15 |
| 1318 | 273 | 0.27 | 3.42 |
| 1327 | 316 | 0.32 | 3.74 |
| 1335 | 359 | 0.36 | 4.10 |
| 1342 | 471 | 0.47 | 4.57 |
| 1348 | 499 | 0.50 | 5.07 |
| 1354 | 553 | 0.55 | 5.62 |
| 1359 | 622 | 0.62 | 6.25 |
| 1364 | 696 | 0.70 | 6.94 |
| 1369 | 640 | 0.64 | 7.58 |
| 1373 | 686 | 0.69 | 8.27 |
| 1377 | 762 | 0.76 | 9.03 |
| 1382 | 813 | 0.81 | 9.84 |
| 1386 | 852 | 0.85 | 10.70 |
| 1390 | 908 | 0.91 | 11.61 |
| 1393 | 971 | 0.97 | 12.58 |
| 1397 | 1,065 | 1.07 | 13.64 |
| 1401 | 1,263 | 1.26 | 14.91 |
| 1405 | 1,316 | 1.32 | 16.22 |
| 1409 | 1,529 | 1.53 | 17.75 |
| 1413 | 1,857 | 1.86 | 19.61 |
| 1417 | 2,100 | 2.10 | 21.71 |
| 1421 | 2,521 | 2.52 | 24.23 |
| 1425 | 3,009 | 3.01 | 27.24 |
| 1430 | 3,506 | 3.51 | 30.75 |
| 1435 | 3,939 | 3.94 | 34.69 |
| 1440 | 4,633 | 4.64 | 39.33 |
| 1446 | 5,166 | 5.17 | 44.50 |
| 1452 | 5,603 | 5.61 | 50.10 |
| 1459 | 6,065 | 6.07 | 56.17 |
| 1466 | 6,567 | 6.57 | 62.74 |
| 1474 | 6,526 | 6.53 | 69.27 |
| 1482 | 6,468 | 6.47 | 75.74 |
| 1491 | 5,917 | 5.92 | 81.66 |
| 1501 | 5,339 | 5.34 | 87.01 |
| 1513 | 4,458 | 4.46 | 91.47 |
| 1526 | 3,450 | 3.45 | 94.92 |
| 1542 | 2,500 | 2.50 | 97.42 |
| 1564 | 1,491 | 1.49 | 98.91 |
| 1602 | 791 | 0.79 | 99.70 |
| 1700 | 298 | 0.30 | 100.00 |

Table 7.C.3 Scale Score Frequency Distribution—Oral Language, Grade Two

|  |  |  |  |
| --- | --- | --- | --- |
| **Scale Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 1150 | 503 | 0.53 | 0.53 |
| 1244 | 329 | 0.34 | 0.87 |
| 1281 | 249 | 0.26 | 1.13 |
| 1301 | 188 | 0.20 | 1.33 |
| 1315 | 164 | 0.17 | 1.50 |
| 1325 | 207 | 0.22 | 1.71 |
| 1334 | 256 | 0.27 | 1.98 |
| 1341 | 318 | 0.33 | 2.31 |
| 1347 | 384 | 0.40 | 2.72 |
| 1353 | 365 | 0.38 | 3.10 |
| 1358 | 340 | 0.36 | 3.45 |
| 1363 | 352 | 0.37 | 3.82 |
| 1367 | 303 | 0.32 | 4.14 |
| 1371 | 308 | 0.32 | 4.46 |
| 1375 | 254 | 0.27 | 4.72 |
| 1379 | 300 | 0.31 | 5.04 |
| 1382 | 370 | 0.39 | 5.43 |
| 1386 | 350 | 0.37 | 5.79 |
| 1389 | 409 | 0.43 | 6.22 |
| 1393 | 453 | 0.47 | 6.69 |
| 1396 | 499 | 0.52 | 7.21 |
| 1399 | 529 | 0.55 | 7.77 |
| 1402 | 586 | 0.61 | 8.38 |
| 1406 | 678 | 0.71 | 9.09 |
| 1409 | 793 | 0.83 | 9.92 |
| 1412 | 838 | 0.88 | 10.79 |
| 1416 | 976 | 1.02 | 11.81 |
| 1419 | 1,109 | 1.16 | 12.97 |
| 1423 | 1,314 | 1.37 | 14.35 |
| 1426 | 1,517 | 1.59 | 15.93 |
| 1430 | 1,696 | 1.77 | 17.70 |
| 1434 | 1,984 | 2.07 | 19.78 |
| 1438 | 2,262 | 2.36 | 22.14 |
| 1443 | 2,655 | 2.78 | 24.92 |
| 1447 | 3,068 | 3.21 | 28.12 |
| 1452 | 3,411 | 3.57 | 31.69 |
| 1458 | 4,055 | 4.24 | 35.93 |
| 1463 | 4,616 | 4.83 | 40.75 |
| 1469 | 5,088 | 5.32 | 46.07 |
| 1476 | 5,491 | 5.74 | 51.81 |
| 1483 | 5,781 | 6.04 | 57.85 |
| 1491 | 6,039 | 6.31 | 64.17 |
| 1499 | 6,171 | 6.45 | 70.62 |
| 1508 | 6,100 | 6.38 | 76.99 |
| 1519 | 5,722 | 5.98 | 82.98 |
| 1530 | 5,114 | 5.35 | 88.32 |
| 1544 | 4,095 | 4.28 | 92.60 |
| 1561 | 3,190 | 3.33 | 95.94 |
| 1584 | 2,196 | 2.30 | 98.23 |
| 1626 | 1,237 | 1.29 | 99.52 |
| 1700 | 455 | 0.48 | 100.00 |

Table 7.C.4 Scale Score Frequency Distribution—Oral Language, Grade Three

|  |  |  |  |
| --- | --- | --- | --- |
| **Scale Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 1150 | 4 | 0.00 | 0.00 |
| 1194 | 9 | 0.01 | 0.01 |
| 1249 | 26 | 0.03 | 0.04 |
| 1278 | 69 | 0.07 | 0.11 |
| 1299 | 156 | 0.16 | 0.27 |
| 1314 | 351 | 0.36 | 0.63 |
| 1326 | 453 | 0.46 | 1.09 |
| 1336 | 571 | 0.58 | 1.67 |
| 1344 | 647 | 0.66 | 2.33 |
| 1352 | 535 | 0.55 | 2.88 |
| 1359 | 492 | 0.50 | 3.38 |
| 1365 | 392 | 0.40 | 3.78 |
| 1370 | 388 | 0.40 | 4.18 |
| 1375 | 320 | 0.33 | 4.51 |
| 1380 | 356 | 0.36 | 4.87 |
| 1384 | 330 | 0.34 | 5.21 |
| 1388 | 353 | 0.36 | 5.57 |
| 1392 | 368 | 0.38 | 5.94 |
| 1396 | 375 | 0.38 | 6.33 |
| 1400 | 390 | 0.40 | 6.73 |
| 1404 | 464 | 0.47 | 7.20 |
| 1407 | 499 | 0.51 | 7.71 |
| 1411 | 601 | 0.61 | 8.32 |
| 1414 | 648 | 0.66 | 8.98 |
| 1418 | 753 | 0.77 | 9.75 |
| 1421 | 844 | 0.86 | 10.62 |
| 1425 | 897 | 0.92 | 11.53 |
| 1429 | 1,129 | 1.15 | 12.69 |
| 1433 | 1,260 | 1.29 | 13.97 |
| 1436 | 1,472 | 1.50 | 15.48 |
| 1441 | 1,699 | 1.74 | 17.21 |
| 1445 | 1,899 | 1.94 | 19.15 |
| 1449 | 2,311 | 2.36 | 21.51 |
| 1453 | 2,683 | 2.74 | 24.25 |
| 1458 | 3,005 | 3.07 | 27.32 |
| 1463 | 3,448 | 3.52 | 30.84 |
| 1468 | 3,869 | 3.95 | 34.79 |
| 1474 | 4,311 | 4.40 | 39.20 |
| 1479 | 4,843 | 4.95 | 44.14 |
| 1485 | 5,131 | 5.24 | 49.38 |
| 1492 | 5,510 | 5.63 | 55.01 |
| 1499 | 5,740 | 5.86 | 60.87 |
| 1506 | 5,995 | 6.12 | 67.00 |
| 1514 | 5,810 | 5.93 | 72.93 |
| 1523 | 5,745 | 5.87 | 78.80 |
| 1532 | 5,154 | 5.26 | 84.06 |
| 1543 | 4,656 | 4.76 | 88.82 |
| 1555 | 3,803 | 3.88 | 92.70 |
| 1571 | 2,918 | 2.98 | 95.68 |
| 1591 | 2,071 | 2.12 | 97.80 |
| 1626 | 1,325 | 1.35 | 99.15 |
| 1701 | 644 | 0.66 | 99.81 |
| 1800 | 186 | 0.19 | 100.00 |

Table 7.C.5 Scale Score Frequency Distribution—Oral Language, Grade Four

|  |  |  |  |
| --- | --- | --- | --- |
| **Scale Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 1150 | 2 | 0.00 | 0.00 |
| 1194 | 6 | 0.01 | 0.01 |
| 1249 | 32 | 0.03 | 0.04 |
| 1278 | 73 | 0.08 | 0.12 |
| 1299 | 151 | 0.16 | 0.28 |
| 1314 | 276 | 0.29 | 0.57 |
| 1326 | 406 | 0.43 | 1.00 |
| 1336 | 527 | 0.56 | 1.56 |
| 1344 | 539 | 0.57 | 2.13 |
| 1352 | 469 | 0.50 | 2.63 |
| 1359 | 359 | 0.38 | 3.01 |
| 1365 | 320 | 0.34 | 3.35 |
| 1370 | 291 | 0.31 | 3.66 |
| 1375 | 285 | 0.30 | 3.96 |
| 1380 | 220 | 0.23 | 4.20 |
| 1384 | 214 | 0.23 | 4.42 |
| 1388 | 241 | 0.26 | 4.68 |
| 1392 | 195 | 0.21 | 4.89 |
| 1396 | 231 | 0.25 | 5.13 |
| 1400 | 215 | 0.23 | 5.36 |
| 1404 | 277 | 0.29 | 5.65 |
| 1407 | 293 | 0.31 | 5.97 |
| 1411 | 307 | 0.33 | 6.29 |
| 1414 | 311 | 0.33 | 6.62 |
| 1418 | 375 | 0.40 | 7.02 |
| 1421 | 414 | 0.44 | 7.46 |
| 1425 | 515 | 0.55 | 8.01 |
| 1429 | 552 | 0.59 | 8.59 |
| 1433 | 633 | 0.67 | 9.26 |
| 1436 | 760 | 0.81 | 10.07 |
| 1441 | 907 | 0.96 | 11.03 |
| 1445 | 1,105 | 1.17 | 12.20 |
| 1449 | 1,203 | 1.28 | 13.48 |
| 1453 | 1,433 | 1.52 | 15.00 |
| 1458 | 1,727 | 1.83 | 16.83 |
| 1463 | 2,098 | 2.23 | 19.06 |
| 1468 | 2,491 | 2.64 | 21.70 |
| 1474 | 3,007 | 3.19 | 24.89 |
| 1479 | 3,445 | 3.66 | 28.55 |
| 1485 | 4,099 | 4.35 | 32.90 |
| 1492 | 4,771 | 5.06 | 37.96 |
| 1499 | 5,334 | 5.66 | 43.62 |
| 1506 | 5,850 | 6.21 | 49.83 |
| 1514 | 6,381 | 6.77 | 56.60 |
| 1523 | 6,915 | 7.34 | 63.94 |
| 1532 | 6,801 | 7.22 | 71.16 |
| 1543 | 6,621 | 7.03 | 78.18 |
| 1555 | 6,153 | 6.53 | 84.71 |
| 1571 | 5,444 | 5.78 | 90.49 |
| 1591 | 4,112 | 4.36 | 94.85 |
| 1626 | 2,832 | 3.01 | 97.86 |
| 1701 | 1,512 | 1.60 | 99.46 |
| 1800 | 509 | 0.54 | 100.00 |

Table 7.C.6 Scale Score Frequency Distribution—Oral Language, Grade Five

|  |  |  |  |
| --- | --- | --- | --- |
| **Scale Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 1150 | 3 | 0.00 | 0.00 |
| 1194 | 7 | 0.01 | 0.01 |
| 1249 | 13 | 0.01 | 0.03 |
| 1278 | 51 | 0.06 | 0.08 |
| 1299 | 148 | 0.17 | 0.25 |
| 1314 | 246 | 0.28 | 0.52 |
| 1326 | 321 | 0.36 | 0.88 |
| 1336 | 452 | 0.51 | 1.39 |
| 1344 | 464 | 0.52 | 1.91 |
| 1352 | 442 | 0.49 | 2.40 |
| 1359 | 418 | 0.47 | 2.87 |
| 1365 | 351 | 0.39 | 3.26 |
| 1370 | 264 | 0.30 | 3.56 |
| 1375 | 225 | 0.25 | 3.81 |
| 1380 | 211 | 0.24 | 4.05 |
| 1384 | 173 | 0.19 | 4.24 |
| 1388 | 168 | 0.19 | 4.43 |
| 1392 | 161 | 0.18 | 4.61 |
| 1396 | 192 | 0.21 | 4.82 |
| 1400 | 203 | 0.23 | 5.05 |
| 1404 | 183 | 0.20 | 5.25 |
| 1407 | 192 | 0.21 | 5.47 |
| 1411 | 186 | 0.21 | 5.68 |
| 1414 | 229 | 0.26 | 5.93 |
| 1418 | 253 | 0.28 | 6.22 |
| 1421 | 282 | 0.32 | 6.53 |
| 1425 | 300 | 0.34 | 6.87 |
| 1429 | 347 | 0.39 | 7.26 |
| 1433 | 366 | 0.41 | 7.67 |
| 1436 | 453 | 0.51 | 8.17 |
| 1441 | 502 | 0.56 | 8.73 |
| 1445 | 591 | 0.66 | 9.40 |
| 1449 | 762 | 0.85 | 10.25 |
| 1453 | 851 | 0.95 | 11.20 |
| 1458 | 1,050 | 1.17 | 12.37 |
| 1463 | 1,278 | 1.43 | 13.80 |
| 1468 | 1,611 | 1.80 | 15.61 |
| 1474 | 1,924 | 2.15 | 17.76 |
| 1479 | 2,335 | 2.61 | 20.37 |
| 1485 | 2,808 | 3.14 | 23.51 |
| 1492 | 3,430 | 3.84 | 27.35 |
| 1499 | 4,139 | 4.63 | 31.98 |
| 1506 | 4,906 | 5.49 | 37.47 |
| 1514 | 5,753 | 6.44 | 43.91 |
| 1523 | 6,415 | 7.18 | 51.09 |
| 1532 | 7,080 | 7.92 | 59.01 |
| 1543 | 7,582 | 8.48 | 67.49 |
| 1555 | 7,452 | 8.34 | 75.83 |
| 1571 | 7,026 | 7.86 | 83.69 |
| 1591 | 6,241 | 6.98 | 90.67 |
| 1626 | 4,580 | 5.12 | 95.80 |
| 1701 | 2,765 | 3.09 | 98.89 |
| 1800 | 991 | 1.11 | 100.00 |

Table 7.C.7 Scale Score Frequency Distribution—Oral Language, Grade Six

|  |  |  |  |
| --- | --- | --- | --- |
| **Scale Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 1150 | 1 | 0.00 | 0.00 |
| 1162 | 2 | 0.00 | 0.00 |
| 1229 | 14 | 0.02 | 0.02 |
| 1266 | 36 | 0.05 | 0.07 |
| 1291 | 89 | 0.12 | 0.19 |
| 1310 | 184 | 0.24 | 0.43 |
| 1325 | 281 | 0.37 | 0.80 |
| 1338 | 328 | 0.43 | 1.23 |
| 1348 | 392 | 0.52 | 1.75 |
| 1357 | 397 | 0.52 | 2.27 |
| 1365 | 343 | 0.45 | 2.72 |
| 1372 | 326 | 0.43 | 3.15 |
| 1378 | 309 | 0.41 | 3.56 |
| 1384 | 255 | 0.34 | 3.90 |
| 1389 | 239 | 0.31 | 4.21 |
| 1394 | 259 | 0.34 | 4.55 |
| 1399 | 217 | 0.29 | 4.84 |
| 1403 | 264 | 0.35 | 5.19 |
| 1408 | 239 | 0.31 | 5.50 |
| 1412 | 280 | 0.37 | 5.87 |
| 1416 | 294 | 0.39 | 6.26 |
| 1421 | 307 | 0.40 | 6.66 |
| 1425 | 374 | 0.49 | 7.16 |
| 1429 | 434 | 0.57 | 7.73 |
| 1433 | 439 | 0.58 | 8.31 |
| 1437 | 559 | 0.74 | 9.04 |
| 1442 | 639 | 0.84 | 9.89 |
| 1446 | 684 | 0.90 | 10.79 |
| 1451 | 750 | 0.99 | 11.78 |
| 1455 | 914 | 1.20 | 12.98 |
| 1460 | 1,114 | 1.47 | 14.45 |
| 1465 | 1,279 | 1.69 | 16.13 |
| 1470 | 1,458 | 1.92 | 18.06 |
| 1475 | 1,715 | 2.26 | 20.32 |
| 1480 | 1,936 | 2.55 | 22.87 |
| 1486 | 2,348 | 3.09 | 25.96 |
| 1492 | 2,536 | 3.34 | 29.30 |
| 1498 | 2,908 | 3.83 | 33.14 |
| 1504 | 3,074 | 4.05 | 37.19 |
| 1511 | 3,419 | 4.51 | 41.69 |
| 1518 | 3,823 | 5.04 | 46.73 |
| 1526 | 4,101 | 5.40 | 52.14 |
| 1532 | 1 | 0.00 | 52.14 |
| 1534 | 4,290 | 5.65 | 57.79 |
| 1542 | 4,471 | 5.89 | 63.68 |
| 1552 | 4,539 | 5.98 | 69.67 |
| 1562 | 4,670 | 6.15 | 75.82 |
| 1574 | 4,442 | 5.85 | 81.67 |
| 1588 | 3,987 | 5.25 | 86.93 |
| 1605 | 3,541 | 4.67 | 91.60 |
| 1628 | 2,877 | 3.79 | 95.39 |
| 1663 | 1,953 | 2.57 | 97.96 |
| 1733 | 1,123 | 1.48 | 99.44 |
| 1900 | 424 | 0.56 | 100.00 |

Table 7.C.8 Scale Score Frequency Distribution—Oral Language, Grade Seven

|  |  |  |  |
| --- | --- | --- | --- |
| **Scale Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 1150 | 2 | 0.00 | 0.00 |
| 1162 | 3 | 0.00 | 0.01 |
| 1229 | 14 | 0.02 | 0.03 |
| 1266 | 48 | 0.07 | 0.10 |
| 1291 | 96 | 0.14 | 0.25 |
| 1310 | 167 | 0.25 | 0.50 |
| 1325 | 252 | 0.38 | 0.88 |
| 1338 | 390 | 0.59 | 1.47 |
| 1348 | 406 | 0.61 | 2.08 |
| 1357 | 439 | 0.66 | 2.74 |
| 1365 | 405 | 0.61 | 3.35 |
| 1372 | 375 | 0.57 | 3.92 |
| 1378 | 307 | 0.46 | 4.38 |
| 1384 | 265 | 0.40 | 4.78 |
| 1389 | 236 | 0.36 | 5.14 |
| 1394 | 249 | 0.38 | 5.51 |
| 1399 | 235 | 0.35 | 5.87 |
| 1403 | 203 | 0.31 | 6.17 |
| 1408 | 234 | 0.35 | 6.53 |
| 1410 | 1 | 0.00 | 6.53 |
| 1412 | 235 | 0.35 | 6.88 |
| 1416 | 230 | 0.35 | 7.23 |
| 1421 | 297 | 0.45 | 7.68 |
| 1425 | 289 | 0.44 | 8.12 |
| 1429 | 318 | 0.48 | 8.60 |
| 1433 | 330 | 0.50 | 9.09 |
| 1437 | 370 | 0.56 | 9.65 |
| 1442 | 428 | 0.65 | 10.30 |
| 1446 | 491 | 0.74 | 11.04 |
| 1451 | 541 | 0.82 | 11.85 |
| 1455 | 607 | 0.92 | 12.77 |
| 1460 | 717 | 1.08 | 13.85 |
| 1465 | 805 | 1.21 | 15.07 |
| 1470 | 883 | 1.33 | 16.40 |
| 1475 | 1,078 | 1.63 | 18.03 |
| 1480 | 1,212 | 1.83 | 19.85 |
| 1486 | 1,419 | 2.14 | 22.00 |
| 1492 | 1,682 | 2.54 | 24.53 |
| 1498 | 1,947 | 2.94 | 27.47 |
| 1504 | 2,174 | 3.28 | 30.75 |
| 1511 | 2,607 | 3.93 | 34.69 |
| 1518 | 2,736 | 4.13 | 38.81 |
| 1526 | 3,044 | 4.59 | 43.41 |
| 1534 | 3,451 | 5.21 | 48.62 |
| 1542 | 3,752 | 5.66 | 54.28 |
| 1552 | 3,875 | 5.85 | 60.12 |
| 1562 | 4,271 | 6.44 | 66.57 |
| 1574 | 4,386 | 6.62 | 73.19 |
| 1588 | 4,382 | 6.61 | 79.80 |
| 1605 | 4,190 | 6.32 | 86.12 |
| 1628 | 3,829 | 5.78 | 91.90 |
| 1663 | 2,871 | 4.33 | 96.23 |
| 1733 | 1,802 | 2.72 | 98.95 |
| 1900 | 695 | 1.05 | 100.00 |

Table 7.C.9 Scale Score Frequency Distribution—Oral Language, Grade Eight

|  |  |  |  |
| --- | --- | --- | --- |
| **Scale Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 1150 | 0 | 0.00 | 0.00 |
| 1229 | 10 | 0.02 | 0.02 |
| 1266 | 52 | 0.09 | 0.10 |
| 1291 | 83 | 0.14 | 0.24 |
| 1310 | 155 | 0.26 | 0.50 |
| 1325 | 239 | 0.40 | 0.89 |
| 1338 | 338 | 0.56 | 1.45 |
| 1348 | 400 | 0.66 | 2.11 |
| 1357 | 395 | 0.65 | 2.76 |
| 1365 | 352 | 0.58 | 3.35 |
| 1372 | 345 | 0.57 | 3.92 |
| 1378 | 338 | 0.56 | 4.47 |
| 1384 | 282 | 0.47 | 4.94 |
| 1389 | 228 | 0.38 | 5.32 |
| 1394 | 238 | 0.39 | 5.71 |
| 1399 | 213 | 0.35 | 6.06 |
| 1403 | 232 | 0.38 | 6.45 |
| 1408 | 221 | 0.37 | 6.81 |
| 1412 | 218 | 0.36 | 7.17 |
| 1416 | 223 | 0.37 | 7.54 |
| 1421 | 246 | 0.41 | 7.95 |
| 1425 | 244 | 0.40 | 8.35 |
| 1429 | 262 | 0.43 | 8.78 |
| 1433 | 343 | 0.57 | 9.35 |
| 1437 | 284 | 0.47 | 9.82 |
| 1442 | 337 | 0.56 | 10.38 |
| 1446 | 384 | 0.63 | 11.01 |
| 1451 | 431 | 0.71 | 11.72 |
| 1455 | 442 | 0.73 | 12.45 |
| 1460 | 548 | 0.91 | 13.36 |
| 1465 | 618 | 1.02 | 14.38 |
| 1470 | 649 | 1.07 | 15.46 |
| 1475 | 780 | 1.29 | 16.74 |
| 1480 | 916 | 1.51 | 18.26 |
| 1486 | 1,013 | 1.67 | 19.93 |
| 1492 | 1,250 | 2.07 | 22.00 |
| 1498 | 1,324 | 2.19 | 24.19 |
| 1504 | 1,606 | 2.65 | 26.84 |
| 1511 | 1,853 | 3.06 | 29.91 |
| 1518 | 2,052 | 3.39 | 33.30 |
| 1520 | 1 | 0.00 | 33.30 |
| 1526 | 2,367 | 3.91 | 37.21 |
| 1534 | 2,672 | 4.42 | 41.63 |
| 1542 | 3,105 | 5.13 | 46.76 |
| 1552 | 3,494 | 5.78 | 52.54 |
| 1562 | 3,821 | 6.32 | 58.85 |
| 1574 | 4,232 | 7.00 | 65.85 |
| 1588 | 4,482 | 7.41 | 73.26 |
| 1605 | 4,637 | 7.66 | 80.92 |
| 1628 | 4,226 | 6.99 | 87.91 |
| 1663 | 3,632 | 6.00 | 93.91 |
| 1733 | 2,614 | 4.32 | 98.23 |
| 1900 | 1,071 | 1.77 | 100.00 |

Table 7.C.10 Scale Score Frequency Distribution—Oral Language, Grade Nine

|  |  |  |  |
| --- | --- | --- | --- |
| **Scale Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 1150 | 2 | 0.00 | 0.00 |
| 1173 | 39 | 0.06 | 0.07 |
| 1223 | 124 | 0.21 | 0.27 |
| 1257 | 263 | 0.44 | 0.71 |
| 1283 | 495 | 0.82 | 1.54 |
| 1302 | 724 | 1.20 | 2.74 |
| 1318 | 893 | 1.49 | 4.22 |
| 1331 | 833 | 1.39 | 5.61 |
| 1342 | 815 | 1.36 | 6.97 |
| 1351 | 583 | 0.97 | 7.93 |
| 1360 | 518 | 0.86 | 8.80 |
| 1367 | 388 | 0.65 | 9.44 |
| 1374 | 283 | 0.47 | 9.91 |
| 1380 | 284 | 0.47 | 10.38 |
| 1386 | 278 | 0.46 | 10.85 |
| 1392 | 248 | 0.41 | 11.26 |
| 1397 | 255 | 0.42 | 11.68 |
| 1402 | 269 | 0.45 | 12.13 |
| 1407 | 247 | 0.41 | 12.54 |
| 1411 | 258 | 0.43 | 12.97 |
| 1416 | 238 | 0.40 | 13.37 |
| 1420 | 255 | 0.42 | 13.79 |
| 1425 | 295 | 0.49 | 14.28 |
| 1429 | 312 | 0.52 | 14.80 |
| 1434 | 361 | 0.60 | 15.40 |
| 1438 | 376 | 0.63 | 16.03 |
| 1443 | 414 | 0.69 | 16.71 |
| 1447 | 477 | 0.79 | 17.51 |
| 1452 | 519 | 0.86 | 18.37 |
| 1457 | 610 | 1.01 | 19.38 |
| 1461 | 724 | 1.20 | 20.59 |
| 1467 | 837 | 1.39 | 21.98 |
| 1472 | 1,003 | 1.67 | 23.65 |
| 1477 | 1,132 | 1.88 | 25.53 |
| 1483 | 1,376 | 2.29 | 27.82 |
| 1490 | 1,564 | 2.60 | 30.42 |
| 1496 | 1,811 | 3.01 | 33.43 |
| 1503 | 2,061 | 3.43 | 36.86 |
| 1511 | 2,412 | 4.01 | 40.87 |
| 1519 | 2,733 | 4.55 | 45.42 |
| 1528 | 3,125 | 5.20 | 50.61 |
| 1538 | 3,436 | 5.71 | 56.33 |
| 1549 | 3,734 | 6.21 | 62.54 |
| 1562 | 3,945 | 6.56 | 69.10 |
| 1577 | 4,098 | 6.82 | 75.92 |
| 1594 | 3,947 | 6.56 | 82.48 |
| 1615 | 3,582 | 5.96 | 88.44 |
| 1642 | 2,873 | 4.78 | 93.21 |
| 1681 | 2,071 | 3.44 | 96.66 |
| 1746 | 1,276 | 2.12 | 98.78 |
| 1872 | 568 | 0.94 | 99.73 |
| 1950 | 165 | 0.27 | 100.00 |

Table 7.C.11 Scale Score Frequency Distribution—Oral Language, Grade Ten

|  |  |  |  |
| --- | --- | --- | --- |
| **Scale Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 1150 | 8 | 0.01 | 0.01 |
| 1173 | 30 | 0.05 | 0.07 |
| 1223 | 81 | 0.14 | 0.21 |
| 1257 | 146 | 0.25 | 0.46 |
| 1283 | 350 | 0.61 | 1.07 |
| 1302 | 478 | 0.83 | 1.91 |
| 1318 | 623 | 1.09 | 2.99 |
| 1331 | 643 | 1.12 | 4.11 |
| 1342 | 645 | 1.13 | 5.24 |
| 1351 | 569 | 0.99 | 6.23 |
| 1360 | 426 | 0.74 | 6.98 |
| 1367 | 354 | 0.62 | 7.59 |
| 1374 | 291 | 0.51 | 8.10 |
| 1380 | 272 | 0.47 | 8.57 |
| 1386 | 254 | 0.44 | 9.02 |
| 1392 | 279 | 0.49 | 9.50 |
| 1397 | 246 | 0.43 | 9.93 |
| 1402 | 242 | 0.42 | 10.36 |
| 1407 | 228 | 0.40 | 10.75 |
| 1411 | 230 | 0.40 | 11.15 |
| 1416 | 270 | 0.47 | 11.63 |
| 1420 | 285 | 0.50 | 12.12 |
| 1425 | 298 | 0.52 | 12.64 |
| 1429 | 277 | 0.48 | 13.13 |
| 1434 | 333 | 0.58 | 13.71 |
| 1438 | 370 | 0.65 | 14.35 |
| 1443 | 386 | 0.67 | 15.03 |
| 1447 | 410 | 0.72 | 15.74 |
| 1452 | 433 | 0.76 | 16.50 |
| 1457 | 525 | 0.92 | 17.41 |
| 1461 | 571 | 1.00 | 18.41 |
| 1467 | 691 | 1.21 | 19.61 |
| 1472 | 755 | 1.32 | 20.93 |
| 1477 | 900 | 1.57 | 22.50 |
| 1483 | 1,026 | 1.79 | 24.29 |
| 1490 | 1,257 | 2.19 | 26.48 |
| 1496 | 1,437 | 2.51 | 28.99 |
| 1503 | 1,609 | 2.81 | 31.79 |
| 1511 | 1,922 | 3.35 | 35.15 |
| 1519 | 2,261 | 3.94 | 39.09 |
| 1528 | 2,602 | 4.54 | 43.63 |
| 1538 | 2,983 | 5.20 | 48.83 |
| 1549 | 3,343 | 5.83 | 54.66 |
| 1562 | 3,745 | 6.53 | 61.20 |
| 1575 | 1 | 0.00 | 61.20 |
| 1577 | 4,251 | 7.41 | 68.61 |
| 1594 | 4,184 | 7.30 | 75.91 |
| 1615 | 4,023 | 7.02 | 82.93 |
| 1642 | 3,665 | 6.39 | 89.32 |
| 1681 | 2,919 | 5.09 | 94.41 |
| 1746 | 1,943 | 3.39 | 97.80 |
| 1872 | 937 | 1.63 | 99.44 |
| 1950 | 323 | 0.56 | 100.00 |

Table 7.C.12 Scale Score Frequency Distribution—Oral Language, Grade Eleven

|  |  |  |  |
| --- | --- | --- | --- |
| **Scale Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 1150 | 2 | 0.00 | 0.00 |
| 1222 | 10 | 0.02 | 0.02 |
| 1263 | 38 | 0.08 | 0.10 |
| 1290 | 99 | 0.20 | 0.30 |
| 1309 | 229 | 0.46 | 0.76 |
| 1323 | 359 | 0.73 | 1.49 |
| 1335 | 430 | 0.87 | 2.36 |
| 1346 | 480 | 0.97 | 3.33 |
| 1354 | 455 | 0.92 | 4.25 |
| 1362 | 394 | 0.80 | 5.05 |
| 1369 | 355 | 0.72 | 5.76 |
| 1376 | 293 | 0.59 | 6.36 |
| 1382 | 214 | 0.43 | 6.79 |
| 1388 | 245 | 0.50 | 7.28 |
| 1393 | 214 | 0.43 | 7.72 |
| 1399 | 231 | 0.47 | 8.18 |
| 1404 | 213 | 0.43 | 8.62 |
| 1409 | 220 | 0.44 | 9.06 |
| 1414 | 256 | 0.52 | 9.58 |
| 1418 | 254 | 0.51 | 10.09 |
| 1423 | 266 | 0.54 | 10.63 |
| 1428 | 277 | 0.56 | 11.19 |
| 1432 | 325 | 0.66 | 11.85 |
| 1434 | 1 | 0.00 | 11.85 |
| 1437 | 313 | 0.63 | 12.48 |
| 1441 | 330 | 0.67 | 13.15 |
| 1446 | 375 | 0.76 | 13.91 |
| 1451 | 390 | 0.79 | 14.69 |
| 1455 | 485 | 0.98 | 15.68 |
| 1460 | 494 | 1.00 | 16.67 |
| 1465 | 589 | 1.19 | 17.86 |
| 1470 | 687 | 1.39 | 19.25 |
| 1476 | 824 | 1.67 | 20.92 |
| 1481 | 893 | 1.81 | 22.73 |
| 1487 | 1,059 | 2.14 | 24.87 |
| 1493 | 1,163 | 2.35 | 27.22 |
| 1499 | 1,357 | 2.74 | 29.96 |
| 1506 | 1,496 | 3.02 | 32.99 |
| 1513 | 1,699 | 3.44 | 36.42 |
| 1520 | 1,925 | 3.89 | 40.31 |
| 1528 | 2,119 | 4.28 | 44.60 |
| 1537 | 2,399 | 4.85 | 49.45 |
| 1546 | 2,602 | 5.26 | 54.71 |
| 1557 | 2,850 | 5.76 | 60.47 |
| 1568 | 3,088 | 6.24 | 66.71 |
| 1582 | 3,190 | 6.45 | 73.16 |
| 1597 | 3,291 | 6.65 | 79.82 |
| 1616 | 3,053 | 6.17 | 85.99 |
| 1640 | 2,635 | 5.33 | 91.32 |
| 1672 | 2,015 | 4.07 | 95.39 |
| 1723 | 1,333 | 2.70 | 98.09 |
| 1822 | 743 | 1.50 | 99.59 |
| 1950 | 203 | 0.41 | 100.00 |

Table 7.C.13 Scale Score Frequency Distribution—Oral Language, Grade Twelve

|  |  |  |  |
| --- | --- | --- | --- |
| **Scale Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 1150 | 2 | 0.01 | 0.01 |
| 1222 | 7 | 0.02 | 0.02 |
| 1263 | 41 | 0.10 | 0.13 |
| 1290 | 80 | 0.20 | 0.33 |
| 1309 | 167 | 0.42 | 0.75 |
| 1323 | 246 | 0.62 | 1.37 |
| 1335 | 340 | 0.86 | 2.23 |
| 1346 | 332 | 0.84 | 3.06 |
| 1354 | 341 | 0.86 | 3.92 |
| 1362 | 316 | 0.80 | 4.72 |
| 1369 | 265 | 0.67 | 5.39 |
| 1376 | 250 | 0.63 | 6.02 |
| 1382 | 177 | 0.45 | 6.47 |
| 1388 | 191 | 0.48 | 6.95 |
| 1393 | 165 | 0.42 | 7.36 |
| 1399 | 207 | 0.52 | 7.89 |
| 1404 | 184 | 0.46 | 8.35 |
| 1409 | 209 | 0.53 | 8.88 |
| 1414 | 202 | 0.51 | 9.39 |
| 1418 | 218 | 0.55 | 9.94 |
| 1423 | 231 | 0.58 | 10.52 |
| 1428 | 210 | 0.53 | 11.05 |
| 1432 | 238 | 0.60 | 11.65 |
| 1437 | 259 | 0.65 | 12.30 |
| 1441 | 278 | 0.70 | 13.00 |
| 1446 | 331 | 0.83 | 13.84 |
| 1451 | 387 | 0.98 | 14.81 |
| 1455 | 388 | 0.98 | 15.79 |
| 1460 | 448 | 1.13 | 16.92 |
| 1465 | 488 | 1.23 | 18.15 |
| 1470 | 552 | 1.39 | 19.55 |
| 1476 | 685 | 1.73 | 21.27 |
| 1481 | 723 | 1.82 | 23.10 |
| 1487 | 870 | 2.19 | 25.29 |
| 1493 | 917 | 2.31 | 27.60 |
| 1499 | 1,111 | 2.80 | 30.40 |
| 1506 | 1,213 | 3.06 | 33.46 |
| 1513 | 1,345 | 3.39 | 36.86 |
| 1520 | 1,466 | 3.70 | 40.55 |
| 1528 | 1,612 | 4.07 | 44.62 |
| 1537 | 1,858 | 4.69 | 49.30 |
| 1546 | 2,017 | 5.09 | 54.39 |
| 1557 | 2,193 | 5.53 | 59.92 |
| 1568 | 2,341 | 5.90 | 65.83 |
| 1582 | 2,509 | 6.33 | 72.15 |
| 1597 | 2,496 | 6.29 | 78.45 |
| 1616 | 2,405 | 6.07 | 84.51 |
| 1640 | 2,296 | 5.79 | 90.30 |
| 1672 | 1,759 | 4.44 | 94.74 |
| 1723 | 1,205 | 3.04 | 97.78 |
| 1822 | 677 | 1.71 | 99.49 |
| 1950 | 204 | 0.51 | 100.00 |

Table 7.C.14 Scale Score Frequency Distribution—Written Language, Kindergarten

|  |  |  |  |
| --- | --- | --- | --- |
| **Scale Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 1150 | 2,561 | 1.86 | 1.86 |
| 1217 | 1,395 | 1.01 | 2.87 |
| 1251 | 1,520 | 1.10 | 3.98 |
| 1270 | 1,502 | 1.09 | 5.07 |
| 1284 | 1,727 | 1.25 | 6.32 |
| 1295 | 1,955 | 1.42 | 7.74 |
| 1304 | 2,331 | 1.69 | 9.43 |
| 1312 | 2,658 | 1.93 | 11.36 |
| 1319 | 1 | 0.00 | 11.36 |
| 1320 | 2,914 | 2.12 | 13.48 |
| 1327 | 3,086 | 2.24 | 15.72 |
| 1334 | 3,364 | 2.44 | 18.16 |
| 1340 | 3,502 | 2.54 | 20.71 |
| 1345 | 3,791 | 2.75 | 23.46 |
| 1350 | 3,776 | 2.74 | 26.20 |
| 1354 | 3,951 | 2.87 | 29.07 |
| 1359 | 4,065 | 2.95 | 32.02 |
| 1363 | 3,995 | 2.90 | 34.92 |
| 1367 | 4,226 | 3.07 | 37.99 |
| 1371 | 4,265 | 3.10 | 41.09 |
| 1375 | 4,467 | 3.24 | 44.33 |
| 1379 | 4,748 | 3.45 | 47.78 |
| 1383 | 5,083 | 3.69 | 51.47 |
| 1388 | 5,114 | 3.71 | 55.18 |
| 1393 | 5,658 | 4.11 | 59.29 |
| 1399 | 6,122 | 4.45 | 63.73 |
| 1406 | 6,835 | 4.96 | 68.70 |
| 1415 | 8,001 | 5.81 | 74.51 |
| 1428 | 9,459 | 6.87 | 81.37 |
| 1451 | 11,399 | 8.28 | 89.65 |
| 1700 | 14,253 | 10.35 | 100.00 |

Table 7.C.15 Scale Score Frequency Distribution—Written Language, Grade One

|  |  |  |  |
| --- | --- | --- | --- |
| **Scale Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 1150 | 1,986 | 1.99 | 1.99 |
| 1310 | 2,207 | 2.21 | 4.20 |
| 1332 | 2,371 | 2.37 | 6.57 |
| 1346 | 2,437 | 2.44 | 9.01 |
| 1352 | 2 | 0.00 | 9.01 |
| 1356 | 2,303 | 2.30 | 11.31 |
| 1363 | 2,279 | 2.28 | 13.59 |
| 1370 | 2,222 | 2.22 | 15.82 |
| 1375 | 2,202 | 2.20 | 18.02 |
| 1380 | 2,139 | 2.14 | 20.16 |
| 1383 | 1 | 0.00 | 20.16 |
| 1385 | 2,332 | 2.33 | 22.49 |
| 1389 | 2,254 | 2.26 | 24.75 |
| 1393 | 2,316 | 2.32 | 27.07 |
| 1397 | 2,512 | 2.51 | 29.58 |
| 1400 | 2,411 | 2.41 | 31.99 |
| 1404 | 2,540 | 2.54 | 34.53 |
| 1407 | 2,456 | 2.46 | 36.99 |
| 1411 | 2,463 | 2.46 | 39.45 |
| 1414 | 2,616 | 2.62 | 42.07 |
| 1417 | 2,486 | 2.49 | 44.56 |
| 1420 | 2,571 | 2.57 | 47.13 |
| 1423 | 2,477 | 2.48 | 49.61 |
| 1427 | 2,394 | 2.40 | 52.00 |
| 1430 | 2,427 | 2.43 | 54.43 |
| 1434 | 2,506 | 2.51 | 56.94 |
| 1437 | 2,576 | 2.58 | 59.52 |
| 1441 | 2,522 | 2.52 | 62.04 |
| 1445 | 2,524 | 2.53 | 64.57 |
| 1449 | 2,644 | 2.65 | 67.21 |
| 1453 | 2,621 | 2.62 | 69.83 |
| 1457 | 2,707 | 2.71 | 72.54 |
| 1462 | 2,918 | 2.92 | 75.46 |
| 1467 | 3,046 | 3.05 | 78.51 |
| 1473 | 3,258 | 3.26 | 81.77 |
| 1480 | 3,405 | 3.41 | 85.18 |
| 1487 | 3,447 | 3.45 | 88.62 |
| 1493 | 1 | 0.00 | 88.63 |
| 1496 | 3,413 | 3.41 | 92.04 |
| 1509 | 3,203 | 3.20 | 95.25 |
| 1530 | 2,806 | 2.81 | 98.05 |
| 1700 | 1,946 | 1.95 | 100.00 |

Table 7.C.16 Scale Score Frequency Distribution—Written Language, Grade Two

|  |  |  |  |
| --- | --- | --- | --- |
| **Scale Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 1150 | 800 | 0.84 | 0.84 |
| 1306 | 888 | 0.93 | 1.76 |
| 1336 | 1,065 | 1.11 | 2.88 |
| 1348 | 1 | 0.00 | 2.88 |
| 1353 | 1,010 | 1.06 | 3.93 |
| 1364 | 942 | 0.98 | 4.92 |
| 1373 | 835 | 0.87 | 5.79 |
| 1380 | 940 | 0.98 | 6.77 |
| 1386 | 953 | 1.00 | 7.77 |
| 1391 | 1,058 | 1.11 | 8.88 |
| 1396 | 1,235 | 1.29 | 10.17 |
| 1400 | 1,314 | 1.37 | 11.54 |
| 1404 | 1,469 | 1.54 | 13.08 |
| 1407 | 1,543 | 1.61 | 14.69 |
| 1411 | 1,507 | 1.58 | 16.26 |
| 1414 | 1,594 | 1.67 | 17.93 |
| 1417 | 1,588 | 1.66 | 19.59 |
| 1421 | 1,603 | 1.68 | 21.27 |
| 1424 | 1,646 | 1.72 | 22.99 |
| 1427 | 1,684 | 1.76 | 24.75 |
| 1430 | 1,657 | 1.73 | 26.48 |
| 1432 | 1,718 | 1.80 | 28.28 |
| 1433 | 2 | 0.00 | 28.28 |
| 1435 | 1,887 | 1.97 | 30.25 |
| 1438 | 1,907 | 1.99 | 32.24 |
| 1442 | 1,980 | 2.07 | 34.31 |
| 1443 | 1 | 0.00 | 34.31 |
| 1445 | 1,918 | 2.00 | 36.32 |
| 1448 | 2,081 | 2.18 | 38.49 |
| 1451 | 2,178 | 2.28 | 40.77 |
| 1455 | 2,265 | 2.37 | 43.14 |
| 1458 | 2,411 | 2.52 | 45.66 |
| 1462 | 2,572 | 2.69 | 48.35 |
| 1466 | 2,750 | 2.87 | 51.22 |
| 1470 | 2,965 | 3.10 | 54.32 |
| 1475 | 3,183 | 3.33 | 57.65 |
| 1480 | 3,543 | 3.70 | 61.35 |
| 1485 | 3,825 | 4.00 | 65.35 |
| 1491 | 4,121 | 4.31 | 69.66 |
| 1497 | 4,369 | 4.57 | 74.22 |
| 1505 | 4,578 | 4.79 | 79.01 |
| 1513 | 4,498 | 4.70 | 83.71 |
| 1523 | 4,572 | 4.78 | 88.49 |
| 1536 | 4,247 | 4.44 | 92.93 |
| 1555 | 3,466 | 3.62 | 96.55 |
| 1593 | 2,286 | 2.39 | 98.94 |
| 1700 | 1,012 | 1.06 | 100.00 |

Table 7.C.17 Scale Score Frequency Distribution—Written Language, Grade Three

|  |  |  |  |
| --- | --- | --- | --- |
| **Scale Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 1150 | 11 | 0.01 | 0.01 |
| 1322 | 45 | 0.05 | 0.06 |
| 1362 | 126 | 0.13 | 0.19 |
| 1378 | 1 | 0.00 | 0.19 |
| 1381 | 308 | 0.31 | 0.50 |
| 1394 | 709 | 0.72 | 1.23 |
| 1405 | 1,230 | 1.26 | 2.48 |
| 1413 | 1,839 | 1.88 | 4.36 |
| 1420 | 2,403 | 2.45 | 6.81 |
| 1427 | 2,920 | 2.98 | 9.80 |
| 1433 | 3,361 | 3.43 | 13.23 |
| 1438 | 3,694 | 3.77 | 17.00 |
| 1442 | 1 | 0.00 | 17.00 |
| 1444 | 3,971 | 4.06 | 21.06 |
| 1449 | 4,222 | 4.31 | 25.37 |
| 1454 | 4,256 | 4.35 | 29.72 |
| 1459 | 4,176 | 4.27 | 33.98 |
| 1463 | 4,144 | 4.23 | 38.22 |
| 1468 | 4,058 | 4.14 | 42.36 |
| 1472 | 4,148 | 4.24 | 46.60 |
| 1477 | 3,949 | 4.03 | 50.63 |
| 1482 | 3,998 | 4.08 | 54.71 |
| 1486 | 3,834 | 3.92 | 58.63 |
| 1491 | 3,746 | 3.83 | 62.46 |
| 1496 | 3,705 | 3.78 | 66.24 |
| 1500 | 3,621 | 3.70 | 69.94 |
| 1505 | 3,539 | 3.61 | 73.55 |
| 1510 | 3,483 | 3.56 | 77.11 |
| 1516 | 3,309 | 3.38 | 80.49 |
| 1521 | 3,182 | 3.25 | 83.74 |
| 1527 | 2,928 | 2.99 | 86.73 |
| 1533 | 2,559 | 2.61 | 89.35 |
| 1540 | 2,273 | 2.32 | 91.67 |
| 1547 | 1,913 | 1.95 | 93.62 |
| 1555 | 1,660 | 1.70 | 95.32 |
| 1564 | 1,376 | 1.41 | 96.72 |
| 1573 | 1,006 | 1.03 | 97.75 |
| 1583 | 812 | 0.83 | 98.58 |
| 1595 | 548 | 0.56 | 99.14 |
| 1608 | 401 | 0.41 | 99.55 |
| 1622 | 237 | 0.24 | 99.79 |
| 1641 | 133 | 0.14 | 99.93 |
| 1667 | 51 | 0.05 | 99.98 |
| 1709 | 13 | 0.01 | 99.99 |
| 1799 | 8 | 0.01 | 100.00 |
| 1800 | 1 | 0.00 | 100.00 |

Table 7.C.18 Scale Score Frequency Distribution—Written Language, Grade Four

|  |  |  |  |
| --- | --- | --- | --- |
| **Scale Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 1150 | 4 | 0.00 | 0.00 |
| 1322 | 25 | 0.03 | 0.03 |
| 1362 | 83 | 0.09 | 0.12 |
| 1381 | 183 | 0.19 | 0.31 |
| 1394 | 358 | 0.38 | 0.69 |
| 1405 | 659 | 0.70 | 1.39 |
| 1413 | 970 | 1.03 | 2.42 |
| 1420 | 1,257 | 1.33 | 3.76 |
| 1427 | 1,528 | 1.62 | 5.38 |
| 1433 | 1,816 | 1.93 | 7.30 |
| 1438 | 1,975 | 2.10 | 9.40 |
| 1444 | 2,205 | 2.34 | 11.74 |
| 1449 | 2,317 | 2.46 | 14.20 |
| 1454 | 2,573 | 2.73 | 16.93 |
| 1459 | 2,636 | 2.80 | 19.73 |
| 1463 | 2,717 | 2.88 | 22.61 |
| 1468 | 2,846 | 3.02 | 25.63 |
| 1472 | 2,941 | 3.12 | 28.75 |
| 1474 | 1 | 0.00 | 28.75 |
| 1477 | 3,055 | 3.24 | 31.99 |
| 1482 | 3,132 | 3.32 | 35.32 |
| 1486 | 3,144 | 3.34 | 38.65 |
| 1491 | 3,285 | 3.49 | 42.14 |
| 1496 | 3,534 | 3.75 | 45.89 |
| 1500 | 3,451 | 3.66 | 49.55 |
| 1505 | 3,679 | 3.90 | 53.45 |
| 1510 | 3,918 | 4.16 | 57.61 |
| 1516 | 3,910 | 4.15 | 61.76 |
| 1521 | 3,945 | 4.19 | 65.95 |
| 1523 | 1 | 0.00 | 65.95 |
| 1527 | 4,119 | 4.37 | 70.32 |
| 1533 | 3,967 | 4.21 | 74.53 |
| 1540 | 4,023 | 4.27 | 78.80 |
| 1547 | 3,905 | 4.14 | 82.94 |
| 1555 | 3,612 | 3.83 | 86.77 |
| 1564 | 3,140 | 3.33 | 90.10 |
| 1573 | 2,784 | 2.95 | 93.06 |
| 1583 | 2,237 | 2.37 | 95.43 |
| 1595 | 1,677 | 1.78 | 97.21 |
| 1608 | 1,154 | 1.22 | 98.44 |
| 1622 | 748 | 0.79 | 99.23 |
| 1641 | 414 | 0.44 | 99.67 |
| 1667 | 190 | 0.20 | 99.87 |
| 1709 | 96 | 0.10 | 99.97 |
| 1799 | 22 | 0.02 | 100.00 |
| 1800 | 3 | 0.00 | 100.00 |

Table 7.C.19 Scale Score Frequency Distribution—Written Language, Grade Five

|  |  |  |  |
| --- | --- | --- | --- |
| **Scale Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 1150 | 7 | 0.01 | 0.01 |
| 1322 | 7 | 0.01 | 0.02 |
| 1362 | 42 | 0.05 | 0.06 |
| 1381 | 106 | 0.12 | 0.18 |
| 1394 | 224 | 0.25 | 0.43 |
| 1405 | 430 | 0.48 | 0.91 |
| 1413 | 579 | 0.65 | 1.56 |
| 1420 | 794 | 0.89 | 2.45 |
| 1427 | 916 | 1.02 | 3.47 |
| 1433 | 1,037 | 1.16 | 4.63 |
| 1438 | 1,226 | 1.37 | 6.01 |
| 1444 | 1,291 | 1.44 | 7.45 |
| 1449 | 1,407 | 1.57 | 9.02 |
| 1454 | 1,474 | 1.65 | 10.67 |
| 1459 | 1,524 | 1.71 | 12.38 |
| 1463 | 1,733 | 1.94 | 14.32 |
| 1468 | 1,824 | 2.04 | 16.36 |
| 1472 | 1,961 | 2.19 | 18.55 |
| 1477 | 2,059 | 2.30 | 20.86 |
| 1482 | 2,148 | 2.40 | 23.26 |
| 1486 | 2,271 | 2.54 | 25.80 |
| 1491 | 2,485 | 2.78 | 28.58 |
| 1496 | 2,559 | 2.86 | 31.44 |
| 1500 | 2,806 | 3.14 | 34.58 |
| 1505 | 3,031 | 3.39 | 37.98 |
| 1510 | 3,327 | 3.72 | 41.70 |
| 1516 | 3,572 | 4.00 | 45.69 |
| 1521 | 3,830 | 4.29 | 49.98 |
| 1527 | 4,104 | 4.59 | 54.57 |
| 1533 | 4,323 | 4.84 | 59.41 |
| 1540 | 4,659 | 5.21 | 64.62 |
| 1547 | 4,725 | 5.29 | 69.91 |
| 1555 | 4,809 | 5.38 | 75.29 |
| 1564 | 4,473 | 5.00 | 80.29 |
| 1573 | 4,265 | 4.77 | 85.07 |
| 1583 | 3,865 | 4.32 | 89.39 |
| 1595 | 3,217 | 3.60 | 92.99 |
| 1608 | 2,507 | 2.81 | 95.79 |
| 1622 | 1,776 | 1.99 | 97.78 |
| 1641 | 1,104 | 1.24 | 99.02 |
| 1667 | 558 | 0.62 | 99.64 |
| 1709 | 243 | 0.27 | 99.91 |
| 1799 | 62 | 0.07 | 99.98 |
| 1800 | 16 | 0.02 | 100.00 |

Table 7.C.20 Scale Score Frequency Distribution—Written Language, Grade Six

|  |  |  |  |
| --- | --- | --- | --- |
| **Scale Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 1150 | 3 | 0.00 | 0.00 |
| 1323 | 14 | 0.02 | 0.02 |
| 1361 | 41 | 0.05 | 0.08 |
| 1383 | 105 | 0.14 | 0.21 |
| 1398 | 230 | 0.30 | 0.52 |
| 1411 | 402 | 0.53 | 1.05 |
| 1421 | 657 | 0.87 | 1.91 |
| 1426 | 1 | 0.00 | 1.91 |
| 1429 | 845 | 1.11 | 3.03 |
| 1437 | 1,018 | 1.34 | 4.37 |
| 1444 | 1,118 | 1.47 | 5.84 |
| 1450 | 1,170 | 1.54 | 7.39 |
| 1456 | 1,325 | 1.75 | 9.13 |
| 1462 | 1,473 | 1.94 | 11.07 |
| 1467 | 1,625 | 2.14 | 13.21 |
| 1473 | 1,707 | 2.25 | 15.46 |
| 1478 | 1,895 | 2.50 | 17.96 |
| 1483 | 2,025 | 2.67 | 20.63 |
| 1488 | 2,294 | 3.02 | 23.65 |
| 1493 | 2,466 | 3.25 | 26.90 |
| 1498 | 2,597 | 3.42 | 30.33 |
| 1500 | 1 | 0.00 | 30.33 |
| 1503 | 2,703 | 3.56 | 33.89 |
| 1508 | 2,911 | 3.84 | 37.73 |
| 1513 | 3,103 | 4.09 | 41.82 |
| 1518 | 3,165 | 4.17 | 45.99 |
| 1523 | 3,260 | 4.30 | 50.28 |
| 1529 | 3,402 | 4.48 | 54.77 |
| 1534 | 3,574 | 4.71 | 59.48 |
| 1535 | 2 | 0.00 | 59.48 |
| 1540 | 3,461 | 4.56 | 64.04 |
| 1545 | 3,480 | 4.59 | 68.63 |
| 1552 | 3,483 | 4.59 | 73.22 |
| 1558 | 3,304 | 4.35 | 77.57 |
| 1565 | 3,173 | 4.18 | 81.75 |
| 1572 | 2,918 | 3.85 | 85.60 |
| 1580 | 2,640 | 3.48 | 89.08 |
| 1588 | 2,263 | 2.98 | 92.06 |
| 1597 | 1,904 | 2.51 | 94.57 |
| 1607 | 1,520 | 2.00 | 96.57 |
| 1618 | 1,098 | 1.45 | 98.02 |
| 1631 | 730 | 0.96 | 98.98 |
| 1646 | 419 | 0.55 | 99.53 |
| 1664 | 212 | 0.28 | 99.81 |
| 1692 | 103 | 0.14 | 99.95 |
| 1743 | 29 | 0.04 | 99.99 |
| 1900 | 9 | 0.01 | 100.00 |

Table 7.C.21 Scale Score Frequency Distribution—Written Language, Grade Seven

|  |  |  |  |
| --- | --- | --- | --- |
| **Scale Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 1150 | 2 | 0.00 | 0.00 |
| 1323 | 2 | 0.00 | 0.01 |
| 1361 | 25 | 0.04 | 0.04 |
| 1383 | 86 | 0.13 | 0.17 |
| 1398 | 163 | 0.25 | 0.42 |
| 1411 | 366 | 0.55 | 0.97 |
| 1421 | 482 | 0.73 | 1.70 |
| 1429 | 669 | 1.01 | 2.71 |
| 1437 | 779 | 1.18 | 3.88 |
| 1444 | 928 | 1.40 | 5.28 |
| 1450 | 991 | 1.50 | 6.78 |
| 1456 | 1,032 | 1.56 | 8.34 |
| 1462 | 1,101 | 1.66 | 10.00 |
| 1467 | 1,251 | 1.89 | 11.89 |
| 1473 | 1,344 | 2.03 | 13.91 |
| 1478 | 1,452 | 2.19 | 16.11 |
| 1483 | 1,469 | 2.22 | 18.32 |
| 1488 | 1,679 | 2.53 | 20.86 |
| 1493 | 1,770 | 2.67 | 23.53 |
| 1498 | 1,892 | 2.85 | 26.38 |
| 1503 | 2,030 | 3.06 | 29.44 |
| 1508 | 2,182 | 3.29 | 32.74 |
| 1513 | 2,226 | 3.36 | 36.10 |
| 1518 | 2,327 | 3.51 | 39.61 |
| 1523 | 2,424 | 3.66 | 43.26 |
| 1529 | 2,612 | 3.94 | 47.21 |
| 1534 | 2,678 | 4.04 | 51.25 |
| 1540 | 2,779 | 4.19 | 55.44 |
| 1545 | 2,837 | 4.28 | 59.72 |
| 1552 | 2,926 | 4.42 | 64.14 |
| 1558 | 3,022 | 4.56 | 68.70 |
| 1565 | 2,969 | 4.48 | 73.18 |
| 1572 | 3,007 | 4.54 | 77.71 |
| 1580 | 2,864 | 4.32 | 82.04 |
| 1588 | 2,792 | 4.21 | 86.25 |
| 1597 | 2,522 | 3.81 | 90.05 |
| 1607 | 2,114 | 3.19 | 93.24 |
| 1618 | 1,700 | 2.57 | 95.81 |
| 1631 | 1,221 | 1.84 | 97.65 |
| 1646 | 834 | 1.26 | 98.91 |
| 1664 | 458 | 0.69 | 99.60 |
| 1692 | 186 | 0.28 | 99.88 |
| 1743 | 67 | 0.10 | 99.98 |
| 1900 | 11 | 0.02 | 100.00 |

Table 7.C.22 Scale Score Frequency Distribution—Written Language, Grade Eight

|  |  |  |  |
| --- | --- | --- | --- |
| **Scale Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 1150 | 0 | 0.00 | 0.00 |
| 1323 | 6 | 0.01 | 0.01 |
| 1361 | 25 | 0.04 | 0.05 |
| 1383 | 66 | 0.11 | 0.16 |
| 1398 | 145 | 0.24 | 0.40 |
| 1411 | 270 | 0.45 | 0.85 |
| 1421 | 405 | 0.67 | 1.52 |
| 1429 | 470 | 0.78 | 2.29 |
| 1437 | 624 | 1.03 | 3.32 |
| 1440 | 1 | 0.00 | 3.33 |
| 1444 | 699 | 1.16 | 4.48 |
| 1450 | 784 | 1.30 | 5.78 |
| 1456 | 851 | 1.41 | 7.18 |
| 1462 | 942 | 1.56 | 8.74 |
| 1467 | 913 | 1.51 | 10.25 |
| 1473 | 1,037 | 1.71 | 11.96 |
| 1478 | 1,134 | 1.87 | 13.84 |
| 1482 | 1 | 0.00 | 13.84 |
| 1483 | 1,206 | 1.99 | 15.83 |
| 1488 | 1,306 | 2.16 | 17.99 |
| 1493 | 1,312 | 2.17 | 20.16 |
| 1498 | 1,446 | 2.39 | 22.55 |
| 1503 | 1,568 | 2.59 | 25.14 |
| 1508 | 1,626 | 2.69 | 27.83 |
| 1513 | 1,681 | 2.78 | 30.61 |
| 1518 | 1,788 | 2.96 | 33.56 |
| 1523 | 1,923 | 3.18 | 36.74 |
| 1529 | 2,006 | 3.32 | 40.06 |
| 1534 | 2,161 | 3.57 | 43.63 |
| 1540 | 2,271 | 3.75 | 47.39 |
| 1545 | 2,366 | 3.91 | 51.30 |
| 1552 | 2,499 | 4.13 | 55.43 |
| 1553 | 1 | 0.00 | 55.43 |
| 1558 | 2,656 | 4.39 | 59.82 |
| 1565 | 2,822 | 4.66 | 64.48 |
| 1572 | 3,013 | 4.98 | 69.46 |
| 1576 | 1 | 0.00 | 69.47 |
| 1580 | 3,110 | 5.14 | 74.61 |
| 1588 | 3,107 | 5.14 | 79.74 |
| 1597 | 2,881 | 4.76 | 84.50 |
| 1607 | 2,726 | 4.51 | 89.01 |
| 1618 | 2,305 | 3.81 | 92.82 |
| 1631 | 1,762 | 2.91 | 95.73 |
| 1646 | 1,276 | 2.11 | 97.84 |
| 1664 | 786 | 1.30 | 99.14 |
| 1692 | 355 | 0.59 | 99.73 |
| 1743 | 139 | 0.23 | 99.96 |
| 1900 | 26 | 0.04 | 100.00 |

Table 7.C.23 Scale Score Frequency Distribution—Written Language, Grade Nine

|  |  |  |  |
| --- | --- | --- | --- |
| **Scale Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 1150 | 0 | 0.00 | 0.00 |
| 1297 | 5 | 0.01 | 0.01 |
| 1347 | 24 | 0.04 | 0.05 |
| 1374 | 117 | 0.19 | 0.24 |
| 1394 | 246 | 0.41 | 0.65 |
| 1408 | 434 | 0.72 | 1.37 |
| 1420 | 647 | 1.08 | 2.45 |
| 1430 | 844 | 1.40 | 3.85 |
| 1439 | 969 | 1.61 | 5.46 |
| 1447 | 1,114 | 1.85 | 7.32 |
| 1454 | 1,156 | 1.92 | 9.24 |
| 1460 | 1,150 | 1.91 | 11.15 |
| 1467 | 1,340 | 2.23 | 13.38 |
| 1472 | 1,298 | 2.16 | 15.54 |
| 1478 | 1,246 | 2.07 | 17.61 |
| 1483 | 1,360 | 2.26 | 19.87 |
| 1489 | 1,472 | 2.45 | 22.32 |
| 1494 | 1,518 | 2.52 | 24.85 |
| 1499 | 1,592 | 2.65 | 27.49 |
| 1505 | 1,762 | 2.93 | 30.42 |
| 1510 | 1,802 | 3.00 | 33.42 |
| 1515 | 1,938 | 3.22 | 36.64 |
| 1518 | 1 | 0.00 | 36.65 |
| 1521 | 2,018 | 3.36 | 40.00 |
| 1526 | 2,120 | 3.53 | 43.53 |
| 1532 | 2,218 | 3.69 | 47.22 |
| 1538 | 2,366 | 3.93 | 51.15 |
| 1544 | 2,473 | 4.11 | 55.26 |
| 1550 | 2,523 | 4.20 | 59.46 |
| 1556 | 2,738 | 4.55 | 64.01 |
| 1563 | 2,739 | 4.56 | 68.57 |
| 1570 | 2,713 | 4.51 | 73.08 |
| 1577 | 2,742 | 4.56 | 77.64 |
| 1585 | 2,718 | 4.52 | 82.16 |
| 1594 | 2,436 | 4.05 | 86.21 |
| 1603 | 2,233 | 3.71 | 89.93 |
| 1612 | 1,834 | 3.05 | 92.98 |
| 1623 | 1,513 | 2.52 | 95.49 |
| 1636 | 1,090 | 1.81 | 97.31 |
| 1650 | 735 | 1.22 | 98.53 |
| 1667 | 493 | 0.82 | 99.35 |
| 1689 | 241 | 0.40 | 99.75 |
| 1722 | 113 | 0.19 | 99.94 |
| 1781 | 31 | 0.05 | 99.99 |
| 1950 | 7 | 0.01 | 100.00 |

Table 7.C.24 Scale Score Frequency Distribution—Written Language, Grade Ten

|  |  |  |  |
| --- | --- | --- | --- |
| **Scale Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 1150 | 1 | 0.00 | 0.00 |
| 1297 | 5 | 0.01 | 0.01 |
| 1347 | 20 | 0.03 | 0.05 |
| 1374 | 65 | 0.11 | 0.16 |
| 1394 | 164 | 0.29 | 0.44 |
| 1408 | 257 | 0.45 | 0.89 |
| 1420 | 445 | 0.78 | 1.67 |
| 1430 | 626 | 1.09 | 2.76 |
| 1439 | 762 | 1.33 | 4.09 |
| 1447 | 873 | 1.52 | 5.61 |
| 1454 | 912 | 1.59 | 7.20 |
| 1460 | 1,000 | 1.74 | 8.95 |
| 1462 | 1 | 0.00 | 8.95 |
| 1467 | 1,093 | 1.91 | 10.86 |
| 1472 | 1,090 | 1.90 | 12.76 |
| 1478 | 1,137 | 1.98 | 14.74 |
| 1483 | 1,209 | 2.11 | 16.85 |
| 1489 | 1,281 | 2.23 | 19.08 |
| 1494 | 1,371 | 2.39 | 21.48 |
| 1499 | 1,425 | 2.49 | 23.96 |
| 1505 | 1,460 | 2.55 | 26.51 |
| 1510 | 1,464 | 2.55 | 29.06 |
| 1515 | 1,647 | 2.87 | 31.93 |
| 1521 | 1,749 | 3.05 | 34.99 |
| 1526 | 1,767 | 3.08 | 38.07 |
| 1532 | 1,852 | 3.23 | 41.30 |
| 1538 | 2,027 | 3.54 | 44.83 |
| 1544 | 2,109 | 3.68 | 48.51 |
| 1550 | 2,294 | 4.00 | 52.51 |
| 1556 | 2,472 | 4.31 | 56.83 |
| 1563 | 2,453 | 4.28 | 61.10 |
| 1570 | 2,642 | 4.61 | 65.71 |
| 1577 | 2,762 | 4.82 | 70.53 |
| 1585 | 2,825 | 4.93 | 75.46 |
| 1588 | 1 | 0.00 | 75.46 |
| 1594 | 2,729 | 4.76 | 80.22 |
| 1603 | 2,689 | 4.69 | 84.91 |
| 1612 | 2,381 | 4.15 | 89.06 |
| 1623 | 2,069 | 3.61 | 92.67 |
| 1636 | 1,607 | 2.80 | 95.48 |
| 1650 | 1,144 | 2.00 | 97.47 |
| 1667 | 827 | 1.44 | 98.91 |
| 1689 | 388 | 0.68 | 99.59 |
| 1722 | 161 | 0.28 | 99.87 |
| 1781 | 63 | 0.11 | 99.98 |
| 1950 | 11 | 0.02 | 100.00 |

Table 7.C.25 Scale Score Frequency Distribution—Written Language, Grade Eleven

|  |  |  |  |
| --- | --- | --- | --- |
| **Scale Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 1150 | 2 | 0.00 | 0.00 |
| 1287 | 2 | 0.00 | 0.01 |
| 1346 | 13 | 0.03 | 0.03 |
| 1376 | 62 | 0.13 | 0.16 |
| 1396 | 136 | 0.27 | 0.43 |
| 1411 | 245 | 0.50 | 0.93 |
| 1423 | 431 | 0.87 | 1.80 |
| 1433 | 495 | 1.00 | 2.80 |
| 1442 | 618 | 1.25 | 4.05 |
| 1450 | 704 | 1.42 | 5.48 |
| 1457 | 805 | 1.63 | 7.10 |
| 1463 | 788 | 1.59 | 8.70 |
| 1469 | 805 | 1.63 | 10.32 |
| 1475 | 821 | 1.66 | 11.98 |
| 1481 | 846 | 1.71 | 13.69 |
| 1486 | 1,000 | 2.02 | 15.72 |
| 1491 | 1,036 | 2.09 | 17.81 |
| 1497 | 1,122 | 2.27 | 20.08 |
| 1502 | 1,241 | 2.51 | 22.59 |
| 1507 | 1,388 | 2.81 | 25.39 |
| 1510 | 1 | 0.00 | 25.40 |
| 1513 | 1,467 | 2.97 | 28.36 |
| 1518 | 1,605 | 3.25 | 31.61 |
| 1524 | 1,668 | 3.37 | 34.98 |
| 1530 | 1,878 | 3.80 | 38.78 |
| 1536 | 1,957 | 3.96 | 42.73 |
| 1543 | 2,134 | 4.31 | 47.05 |
| 1549 | 2,214 | 4.48 | 51.52 |
| 1556 | 2,367 | 4.79 | 56.31 |
| 1563 | 2,430 | 4.91 | 61.22 |
| 1571 | 2,509 | 5.07 | 66.30 |
| 1579 | 2,455 | 4.96 | 71.26 |
| 1588 | 2,498 | 5.05 | 76.31 |
| 1597 | 2,461 | 4.98 | 81.29 |
| 1608 | 2,223 | 4.49 | 85.78 |
| 1619 | 1,859 | 3.76 | 89.54 |
| 1631 | 1,653 | 3.34 | 92.88 |
| 1645 | 1,249 | 2.53 | 95.41 |
| 1660 | 965 | 1.95 | 97.36 |
| 1679 | 604 | 1.22 | 98.58 |
| 1703 | 394 | 0.80 | 99.38 |
| 1736 | 195 | 0.39 | 99.77 |
| 1792 | 77 | 0.16 | 99.93 |
| 1950 | 37 | 0.07 | 100.00 |

Table 7.C.26 Scale Score Frequency Distribution—Written Language, Grade Twelve

|  |  |  |  |
| --- | --- | --- | --- |
| **Scale Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 1150 | 2 | 0.01 | 0.01 |
| 1287 | 4 | 0.01 | 0.02 |
| 1346 | 13 | 0.03 | 0.05 |
| 1376 | 55 | 0.14 | 0.19 |
| 1396 | 119 | 0.30 | 0.49 |
| 1411 | 209 | 0.53 | 1.01 |
| 1423 | 356 | 0.90 | 1.91 |
| 1433 | 445 | 1.12 | 3.03 |
| 1442 | 521 | 1.31 | 4.35 |
| 1450 | 588 | 1.48 | 5.83 |
| 1457 | 624 | 1.57 | 7.40 |
| 1463 | 665 | 1.68 | 9.08 |
| 1469 | 741 | 1.87 | 10.95 |
| 1475 | 777 | 1.96 | 12.91 |
| 1481 | 796 | 2.01 | 14.92 |
| 1486 | 886 | 2.23 | 17.15 |
| 1491 | 953 | 2.40 | 19.56 |
| 1497 | 962 | 2.43 | 21.98 |
| 1502 | 1,139 | 2.87 | 24.85 |
| 1504 | 1 | 0.00 | 24.86 |
| 1507 | 1,138 | 2.87 | 27.73 |
| 1513 | 1,231 | 3.10 | 30.83 |
| 1518 | 1,300 | 3.28 | 34.11 |
| 1524 | 1,388 | 3.50 | 37.61 |
| 1530 | 1,512 | 3.81 | 41.42 |
| 1536 | 1,543 | 3.89 | 45.31 |
| 1543 | 1,630 | 4.11 | 49.42 |
| 1549 | 1,761 | 4.44 | 53.87 |
| 1556 | 1,820 | 4.59 | 58.46 |
| 1563 | 1,816 | 4.58 | 63.04 |
| 1571 | 1,928 | 4.86 | 67.90 |
| 1579 | 1,968 | 4.96 | 72.86 |
| 1588 | 1,892 | 4.77 | 77.63 |
| 1597 | 1,748 | 4.41 | 82.04 |
| 1608 | 1,659 | 4.18 | 86.23 |
| 1616 | 1 | 0.00 | 86.23 |
| 1619 | 1,475 | 3.72 | 89.95 |
| 1631 | 1,236 | 3.12 | 93.06 |
| 1645 | 981 | 2.47 | 95.54 |
| 1660 | 734 | 1.85 | 97.39 |
| 1679 | 517 | 1.30 | 98.69 |
| 1703 | 278 | 0.70 | 99.39 |
| 1736 | 145 | 0.37 | 99.76 |
| 1792 | 68 | 0.17 | 99.93 |
| 1950 | 27 | 0.07 | 100.00 |

Table 7.C.27 Scale Score Frequency Distribution—Overall Score, Kindergarten

|  |  |  |  |
| --- | --- | --- | --- |
| **Scale Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 1150 | 1,621 | 1.18 | 1.18 |
| 1170 | 515 | 0.37 | 1.55 |
| 1180 | 414 | 0.30 | 1.85 |
| 1186 | 280 | 0.20 | 2.05 |
| 1190 | 255 | 0.19 | 2.24 |
| 1194 | 208 | 0.15 | 2.39 |
| 1196 | 147 | 0.11 | 2.50 |
| 1199 | 153 | 0.11 | 2.61 |
| 1201 | 136 | 0.10 | 2.71 |
| 1203 | 88 | 0.06 | 2.77 |
| 1205 | 100 | 0.07 | 2.84 |
| 1207 | 67 | 0.05 | 2.89 |
| 1209 | 68 | 0.05 | 2.94 |
| 1210 | 49 | 0.04 | 2.98 |
| 1211 | 43 | 0.03 | 3.01 |
| 1213 | 27 | 0.02 | 3.03 |
| 1214 | 38 | 0.03 | 3.06 |
| 1215 | 26 | 0.02 | 3.07 |
| 1216 | 20 | 0.01 | 3.09 |
| 1218 | 11 | 0.01 | 3.10 |
| 1219 | 11 | 0.01 | 3.11 |
| 1220 | 8 | 0.01 | 3.11 |
| 1221 | 7 | 0.01 | 3.12 |
| 1223 | 9 | 0.01 | 3.12 |
| 1225 | 4 | 0.00 | 3.13 |
| 1227 | 1 | 0.00 | 3.13 |
| 1230 | 2 | 0.00 | 3.13 |
| 1231 | 175 | 0.13 | 3.26 |
| 1250 | 129 | 0.09 | 3.35 |
| 1251 | 164 | 0.12 | 3.47 |
| 1261 | 70 | 0.05 | 3.52 |
| 1262 | 163 | 0.12 | 3.64 |
| 1267 | 142 | 0.10 | 3.74 |
| 1268 | 63 | 0.05 | 3.79 |
| 1270 | 95 | 0.07 | 3.85 |
| 1271 | 116 | 0.08 | 3.94 |
| 1275 | 138 | 0.10 | 4.04 |
| 1277 | 94 | 0.07 | 4.11 |
| 1280 | 235 | 0.17 | 4.28 |
| 1281 | 54 | 0.04 | 4.32 |
| 1282 | 67 | 0.05 | 4.37 |
| 1284 | 107 | 0.08 | 4.44 |
| 1286 | 153 | 0.11 | 4.55 |
| 1288 | 89 | 0.06 | 4.62 |
| 1289 | 70 | 0.05 | 4.67 |
| 1290 | 169 | 0.12 | 4.79 |
| 1291 | 133 | 0.10 | 4.89 |
| 1292 | 72 | 0.05 | 4.94 |
| 1294 | 118 | 0.09 | 5.03 |
| 1295 | 66 | 0.05 | 5.08 |
| 1296 | 152 | 0.11 | 5.19 |
| 1297 | 92 | 0.07 | 5.25 |
| 1298 | 5 | 0.00 | 5.26 |
| 1299 | 187 | 0.14 | 5.39 |
| 1300 | 64 | 0.05 | 5.44 |
| 1301 | 153 | 0.11 | 5.55 |
| 1303 | 88 | 0.06 | 5.61 |
| 1304 | 181 | 0.13 | 5.74 |
| 1305 | 186 | 0.14 | 5.88 |
| 1307 | 130 | 0.09 | 5.97 |
| 1308 | 17 | 0.01 | 5.99 |
| 1309 | 251 | 0.18 | 6.17 |
| 1310 | 95 | 0.07 | 6.24 |
| 1311 | 118 | 0.09 | 6.32 |
| 1312 | 193 | 0.14 | 6.46 |
| 1313 | 22 | 0.02 | 6.48 |
| 1314 | 94 | 0.07 | 6.55 |
| 1315 | 260 | 0.19 | 6.74 |
| 1316 | 163 | 0.12 | 6.86 |
| 1317 | 87 | 0.06 | 6.92 |
| 1318 | 143 | 0.10 | 7.02 |
| 1319 | 209 | 0.15 | 7.17 |
| 1320 | 140 | 0.10 | 7.28 |
| 1321 | 173 | 0.13 | 7.40 |
| 1322 | 74 | 0.05 | 7.45 |
| 1323 | 243 | 0.18 | 7.63 |
| 1324 | 47 | 0.03 | 7.67 |
| 1325 | 193 | 0.14 | 7.81 |
| 1326 | 291 | 0.21 | 8.02 |
| 1327 | 69 | 0.05 | 8.07 |
| 1328 | 412 | 0.30 | 8.37 |
| 1329 | 140 | 0.10 | 8.47 |
| 1330 | 97 | 0.07 | 8.54 |
| 1331 | 259 | 0.19 | 8.73 |
| 1332 | 293 | 0.21 | 8.94 |
| 1333 | 319 | 0.23 | 9.17 |
| 1334 | 25 | 0.02 | 9.19 |
| 1335 | 389 | 0.28 | 9.47 |
| 1336 | 252 | 0.18 | 9.65 |
| 1337 | 221 | 0.16 | 9.81 |
| 1338 | 260 | 0.19 | 10.00 |
| 1339 | 238 | 0.17 | 10.18 |
| 1340 | 287 | 0.21 | 10.38 |
| 1341 | 316 | 0.23 | 10.61 |
| 1342 | 265 | 0.19 | 10.81 |
| 1343 | 385 | 0.28 | 11.09 |
| 1344 | 349 | 0.25 | 11.34 |
| 1345 | 296 | 0.21 | 11.55 |
| 1346 | 320 | 0.23 | 11.79 |
| 1347 | 447 | 0.32 | 12.11 |
| 1348 | 256 | 0.19 | 12.30 |
| 1349 | 456 | 0.33 | 12.63 |
| 1350 | 260 | 0.19 | 12.82 |
| 1351 | 455 | 0.33 | 13.15 |
| 1352 | 435 | 0.32 | 13.46 |
| 1353 | 297 | 0.22 | 13.68 |
| 1354 | 676 | 0.49 | 14.17 |
| 1355 | 226 | 0.16 | 14.33 |
| 1356 | 504 | 0.37 | 14.70 |
| 1357 | 463 | 0.34 | 15.04 |
| 1358 | 355 | 0.26 | 15.29 |
| 1359 | 375 | 0.27 | 15.57 |
| 1360 | 590 | 0.43 | 15.99 |
| 1361 | 444 | 0.32 | 16.32 |
| 1362 | 539 | 0.39 | 16.71 |
| 1363 | 466 | 0.34 | 17.05 |
| 1364 | 451 | 0.33 | 17.37 |
| 1365 | 724 | 0.53 | 17.90 |
| 1366 | 269 | 0.20 | 18.09 |
| 1367 | 533 | 0.39 | 18.48 |
| 1368 | 736 | 0.53 | 19.02 |
| 1369 | 499 | 0.36 | 19.38 |
| 1370 | 549 | 0.40 | 19.78 |
| 1371 | 626 | 0.45 | 20.23 |
| 1372 | 706 | 0.51 | 20.74 |
| 1373 | 636 | 0.46 | 21.21 |
| 1374 | 557 | 0.40 | 21.61 |
| 1375 | 1,019 | 0.74 | 22.35 |
| 1376 | 544 | 0.39 | 22.75 |
| 1377 | 780 | 0.57 | 23.31 |
| 1378 | 799 | 0.58 | 23.89 |
| 1379 | 684 | 0.50 | 24.39 |
| 1380 | 817 | 0.59 | 24.98 |
| 1381 | 779 | 0.57 | 25.55 |
| 1382 | 784 | 0.57 | 26.12 |
| 1383 | 930 | 0.68 | 26.79 |
| 1384 | 880 | 0.64 | 27.43 |
| 1385 | 655 | 0.48 | 27.91 |
| 1386 | 830 | 0.60 | 28.51 |
| 1387 | 1,003 | 0.73 | 29.24 |
| 1388 | 1,007 | 0.73 | 29.97 |
| 1389 | 950 | 0.69 | 30.66 |
| 1390 | 688 | 0.50 | 31.16 |
| 1391 | 1,050 | 0.76 | 31.92 |
| 1392 | 980 | 0.71 | 32.63 |
| 1393 | 1,225 | 0.89 | 33.52 |
| 1394 | 720 | 0.52 | 34.04 |
| 1395 | 674 | 0.49 | 34.53 |
| 1396 | 1,506 | 1.09 | 35.63 |
| 1397 | 900 | 0.65 | 36.28 |
| 1398 | 988 | 0.72 | 37.00 |
| 1399 | 1,091 | 0.79 | 37.79 |
| 1400 | 1,157 | 0.84 | 38.63 |
| 1401 | 823 | 0.60 | 39.23 |
| 1402 | 1,357 | 0.99 | 40.21 |
| 1403 | 797 | 0.58 | 40.79 |
| 1404 | 1,343 | 0.98 | 41.77 |
| 1405 | 977 | 0.71 | 42.48 |
| 1406 | 958 | 0.70 | 43.17 |
| 1407 | 1,068 | 0.78 | 43.95 |
| 1408 | 1,122 | 0.81 | 44.76 |
| 1409 | 1,247 | 0.91 | 45.67 |
| 1410 | 899 | 0.65 | 46.32 |
| 1411 | 990 | 0.72 | 47.04 |
| 1412 | 1,548 | 1.12 | 48.16 |
| 1413 | 1,157 | 0.84 | 49.00 |
| 1414 | 1,062 | 0.77 | 49.77 |
| 1415 | 1,422 | 1.03 | 50.81 |
| 1416 | 551 | 0.40 | 51.21 |
| 1417 | 1,159 | 0.84 | 52.05 |
| 1418 | 1,242 | 0.90 | 52.95 |
| 1419 | 618 | 0.45 | 53.40 |
| 1420 | 1,494 | 1.08 | 54.48 |
| 1421 | 1,043 | 0.76 | 55.24 |
| 1422 | 923 | 0.67 | 55.91 |
| 1423 | 1,027 | 0.75 | 56.66 |
| 1424 | 1,112 | 0.81 | 57.46 |
| 1425 | 1,163 | 0.84 | 58.31 |
| 1426 | 629 | 0.46 | 58.77 |
| 1427 | 1,399 | 1.02 | 59.78 |
| 1428 | 1,127 | 0.82 | 60.60 |
| 1429 | 374 | 0.27 | 60.87 |
| 1430 | 1,136 | 0.82 | 61.70 |
| 1431 | 1,405 | 1.02 | 62.72 |
| 1432 | 335 | 0.24 | 62.96 |
| 1433 | 975 | 0.71 | 63.67 |
| 1434 | 1,323 | 0.96 | 64.63 |
| 1435 | 1,067 | 0.77 | 65.40 |
| 1436 | 340 | 0.25 | 65.65 |
| 1437 | 1,750 | 1.27 | 66.92 |
| 1438 | 461 | 0.33 | 67.25 |
| 1439 | 886 | 0.64 | 67.90 |
| 1440 | 266 | 0.19 | 68.09 |
| 1441 | 1,693 | 1.23 | 69.32 |
| 1442 | 692 | 0.50 | 69.82 |
| 1443 | 778 | 0.56 | 70.39 |
| 1444 | 967 | 0.70 | 71.09 |
| 1445 | 67 | 0.05 | 71.14 |
| 1446 | 1,809 | 1.31 | 72.45 |
| 1447 | 185 | 0.13 | 72.59 |
| 1448 | 1,296 | 0.94 | 73.53 |
| 1449 | 103 | 0.07 | 73.60 |
| 1450 | 1,087 | 0.79 | 74.39 |
| 1451 | 668 | 0.49 | 74.88 |
| 1452 | 1,208 | 0.88 | 75.75 |
| 1453 | 37 | 0.03 | 75.78 |
| 1454 | 563 | 0.41 | 76.19 |
| 1455 | 956 | 0.69 | 76.88 |
| 1456 | 576 | 0.42 | 77.30 |
| 1457 | 1,125 | 0.82 | 78.12 |
| 1458 | 116 | 0.08 | 78.20 |
| 1459 | 478 | 0.35 | 78.55 |
| 1460 | 733 | 0.53 | 79.08 |
| 1461 | 176 | 0.13 | 79.21 |
| 1462 | 1,598 | 1.16 | 80.37 |
| 1463 | 38 | 0.03 | 80.40 |
| 1464 | 244 | 0.18 | 80.57 |
| 1465 | 61 | 0.04 | 80.62 |
| 1466 | 1,046 | 0.76 | 81.38 |
| 1467 | 994 | 0.72 | 82.10 |
| 1468 | 12 | 0.01 | 82.11 |
| 1469 | 528 | 0.38 | 82.49 |
| 1470 | 171 | 0.12 | 82.62 |
| 1472 | 184 | 0.13 | 82.75 |
| 1473 | 1,584 | 1.15 | 83.90 |
| 1474 | 251 | 0.18 | 84.08 |
| 1475 | 41 | 0.03 | 84.11 |
| 1476 | 64 | 0.05 | 84.16 |
| 1477 | 371 | 0.27 | 84.43 |
| 1478 | 71 | 0.05 | 84.48 |
| 1479 | 76 | 0.06 | 84.54 |
| 1480 | 930 | 0.68 | 85.21 |
| 1481 | 615 | 0.45 | 85.66 |
| 1482 | 140 | 0.10 | 85.76 |
| 1484 | 170 | 0.12 | 85.88 |
| 1485 | 14 | 0.01 | 85.89 |
| 1486 | 9 | 0.01 | 85.90 |
| 1487 | 1,139 | 0.83 | 86.73 |
| 1488 | 10 | 0.01 | 86.73 |
| 1489 | 45 | 0.03 | 86.77 |
| 1490 | 28 | 0.02 | 86.79 |
| 1491 | 461 | 0.33 | 87.12 |
| 1492 | 74 | 0.05 | 87.17 |
| 1494 | 95 | 0.07 | 87.24 |
| 1495 | 51 | 0.04 | 87.28 |
| 1497 | 159 | 0.12 | 87.40 |
| 1498 | 804 | 0.58 | 87.98 |
| 1500 | 107 | 0.08 | 88.06 |
| 1501 | 131 | 0.10 | 88.15 |
| 1503 | 286 | 0.21 | 88.36 |
| 1505 | 172 | 0.12 | 88.48 |
| 1507 | 327 | 0.24 | 88.72 |
| 1508 | 224 | 0.16 | 88.89 |
| 1512 | 247 | 0.18 | 89.06 |
| 1513 | 1 | 0.00 | 89.07 |
| 1514 | 598 | 0.43 | 89.50 |
| 1515 | 350 | 0.25 | 89.75 |
| 1516 | 1 | 0.00 | 89.75 |
| 1517 | 7 | 0.01 | 89.76 |
| 1519 | 450 | 0.33 | 90.09 |
| 1520 | 5 | 0.00 | 90.09 |
| 1521 | 6 | 0.00 | 90.09 |
| 1522 | 8 | 0.01 | 90.10 |
| 1523 | 510 | 0.37 | 90.47 |
| 1525 | 9 | 0.01 | 90.48 |
| 1526 | 18 | 0.01 | 90.49 |
| 1527 | 694 | 0.50 | 90.99 |
| 1529 | 39 | 0.03 | 91.02 |
| 1531 | 876 | 0.64 | 91.66 |
| 1533 | 71 | 0.05 | 91.71 |
| 1535 | 133 | 0.10 | 91.81 |
| 1536 | 902 | 0.65 | 92.46 |
| 1539 | 186 | 0.14 | 92.60 |
| 1542 | 1,044 | 0.76 | 93.35 |
| 1546 | 409 | 0.30 | 93.65 |
| 1547 | 1,229 | 0.89 | 94.54 |
| 1554 | 1,324 | 0.96 | 95.50 |
| 1562 | 1,420 | 1.03 | 96.54 |
| 1573 | 1,399 | 1.02 | 97.55 |
| 1589 | 1,249 | 0.91 | 98.46 |
| 1594 | 2 | 0.00 | 98.46 |
| 1598 | 3 | 0.00 | 98.46 |
| 1599 | 3 | 0.00 | 98.46 |
| 1600 | 4 | 0.00 | 98.47 |
| 1601 | 1 | 0.00 | 98.47 |
| 1603 | 10 | 0.01 | 98.48 |
| 1604 | 4 | 0.00 | 98.48 |
| 1605 | 8 | 0.01 | 98.48 |
| 1606 | 9 | 0.01 | 98.49 |
| 1608 | 10 | 0.01 | 98.50 |
| 1610 | 14 | 0.01 | 98.51 |
| 1612 | 19 | 0.01 | 98.52 |
| 1615 | 37 | 0.03 | 98.55 |
| 1618 | 78 | 0.06 | 98.61 |
| 1621 | 1,107 | 0.80 | 99.41 |
| 1625 | 178 | 0.13 | 99.54 |
| 1700 | 636 | 0.46 | 100.00 |

Table 7.C.28 Scale Score Frequency Distribution—Overall Score, Grade One

|  |  |  |  |
| --- | --- | --- | --- |
| **Scale Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 1150 | 843 | 0.84 | 0.84 |
| 1189 | 105 | 0.11 | 0.95 |
| 1210 | 77 | 0.08 | 1.03 |
| 1221 | 50 | 0.05 | 1.08 |
| 1229 | 50 | 0.05 | 1.13 |
| 1230 | 248 | 0.25 | 1.37 |
| 1234 | 37 | 0.04 | 1.41 |
| 1239 | 32 | 0.03 | 1.44 |
| 1241 | 142 | 0.14 | 1.58 |
| 1243 | 36 | 0.04 | 1.62 |
| 1246 | 44 | 0.04 | 1.66 |
| 1248 | 110 | 0.11 | 1.77 |
| 1249 | 43 | 0.04 | 1.82 |
| 1252 | 48 | 0.05 | 1.87 |
| 1253 | 67 | 0.07 | 1.93 |
| 1255 | 42 | 0.04 | 1.98 |
| 1257 | 79 | 0.08 | 2.05 |
| 1260 | 64 | 0.06 | 2.12 |
| 1262 | 32 | 0.03 | 2.15 |
| 1263 | 26 | 0.03 | 2.18 |
| 1264 | 30 | 0.03 | 2.21 |
| 1265 | 21 | 0.02 | 2.23 |
| 1266 | 34 | 0.03 | 2.26 |
| 1268 | 55 | 0.06 | 2.32 |
| 1269 | 122 | 0.12 | 2.44 |
| 1270 | 37 | 0.04 | 2.48 |
| 1272 | 28 | 0.03 | 2.50 |
| 1274 | 35 | 0.04 | 2.54 |
| 1275 | 12 | 0.01 | 2.55 |
| 1276 | 31 | 0.03 | 2.58 |
| 1277 | 7 | 0.01 | 2.59 |
| 1278 | 23 | 0.02 | 2.61 |
| 1279 | 3 | 0.00 | 2.61 |
| 1280 | 106 | 0.11 | 2.72 |
| 1281 | 1 | 0.00 | 2.72 |
| 1282 | 24 | 0.02 | 2.75 |
| 1284 | 20 | 0.02 | 2.77 |
| 1285 | 2 | 0.00 | 2.77 |
| 1286 | 23 | 0.02 | 2.79 |
| 1287 | 61 | 0.06 | 2.85 |
| 1288 | 22 | 0.02 | 2.87 |
| 1290 | 94 | 0.09 | 2.97 |
| 1292 | 38 | 0.04 | 3.01 |
| 1293 | 16 | 0.02 | 3.02 |
| 1295 | 49 | 0.05 | 3.07 |
| 1298 | 16 | 0.02 | 3.09 |
| 1299 | 22 | 0.02 | 3.11 |
| 1301 | 151 | 0.15 | 3.26 |
| 1304 | 16 | 0.02 | 3.28 |
| 1305 | 14 | 0.01 | 3.29 |
| 1306 | 12 | 0.01 | 3.30 |
| 1308 | 73 | 0.07 | 3.37 |
| 1309 | 30 | 0.03 | 3.40 |
| 1310 | 9 | 0.01 | 3.41 |
| 1312 | 49 | 0.05 | 3.46 |
| 1313 | 39 | 0.04 | 3.50 |
| 1314 | 38 | 0.04 | 3.54 |
| 1316 | 9 | 0.01 | 3.55 |
| 1317 | 37 | 0.04 | 3.59 |
| 1319 | 86 | 0.09 | 3.67 |
| 1320 | 54 | 0.05 | 3.73 |
| 1321 | 4 | 0.00 | 3.73 |
| 1323 | 54 | 0.05 | 3.78 |
| 1324 | 38 | 0.04 | 3.82 |
| 1325 | 41 | 0.04 | 3.86 |
| 1326 | 61 | 0.06 | 3.92 |
| 1327 | 25 | 0.03 | 3.95 |
| 1328 | 24 | 0.02 | 3.97 |
| 1329 | 61 | 0.06 | 4.03 |
| 1330 | 55 | 0.06 | 4.09 |
| 1331 | 8 | 0.01 | 4.10 |
| 1332 | 114 | 0.11 | 4.21 |
| 1334 | 67 | 0.07 | 4.28 |
| 1335 | 86 | 0.09 | 4.36 |
| 1336 | 8 | 0.01 | 4.37 |
| 1337 | 170 | 0.17 | 4.54 |
| 1338 | 1 | 0.00 | 4.54 |
| 1339 | 19 | 0.02 | 4.56 |
| 1340 | 121 | 0.12 | 4.68 |
| 1341 | 68 | 0.07 | 4.75 |
| 1342 | 84 | 0.08 | 4.84 |
| 1343 | 66 | 0.07 | 4.90 |
| 1344 | 128 | 0.13 | 5.03 |
| 1345 | 24 | 0.02 | 5.05 |
| 1346 | 143 | 0.14 | 5.20 |
| 1347 | 56 | 0.06 | 5.25 |
| 1348 | 116 | 0.12 | 5.37 |
| 1349 | 93 | 0.09 | 5.46 |
| 1350 | 105 | 0.11 | 5.57 |
| 1351 | 66 | 0.07 | 5.63 |
| 1352 | 107 | 0.11 | 5.74 |
| 1353 | 186 | 0.19 | 5.93 |
| 1354 | 74 | 0.07 | 6.00 |
| 1355 | 173 | 0.17 | 6.17 |
| 1356 | 144 | 0.14 | 6.32 |
| 1357 | 66 | 0.07 | 6.38 |
| 1358 | 188 | 0.19 | 6.57 |
| 1359 | 178 | 0.18 | 6.75 |
| 1360 | 186 | 0.19 | 6.94 |
| 1361 | 124 | 0.12 | 7.06 |
| 1362 | 193 | 0.19 | 7.25 |
| 1363 | 120 | 0.12 | 7.37 |
| 1364 | 228 | 0.23 | 7.60 |
| 1365 | 164 | 0.16 | 7.77 |
| 1366 | 189 | 0.19 | 7.95 |
| 1367 | 242 | 0.24 | 8.20 |
| 1368 | 192 | 0.19 | 8.39 |
| 1369 | 128 | 0.13 | 8.52 |
| 1370 | 309 | 0.31 | 8.83 |
| 1371 | 151 | 0.15 | 8.98 |
| 1372 | 196 | 0.20 | 9.17 |
| 1373 | 256 | 0.26 | 9.43 |
| 1374 | 223 | 0.22 | 9.65 |
| 1375 | 291 | 0.29 | 9.94 |
| 1376 | 180 | 0.18 | 10.12 |
| 1377 | 301 | 0.30 | 10.42 |
| 1378 | 260 | 0.26 | 10.68 |
| 1379 | 312 | 0.31 | 11.00 |
| 1380 | 195 | 0.20 | 11.19 |
| 1381 | 410 | 0.41 | 11.60 |
| 1382 | 231 | 0.23 | 11.83 |
| 1383 | 247 | 0.25 | 12.08 |
| 1384 | 419 | 0.42 | 12.50 |
| 1385 | 242 | 0.24 | 12.74 |
| 1386 | 454 | 0.45 | 13.20 |
| 1387 | 216 | 0.22 | 13.41 |
| 1388 | 444 | 0.44 | 13.86 |
| 1389 | 305 | 0.31 | 14.16 |
| 1390 | 330 | 0.33 | 14.49 |
| 1391 | 392 | 0.39 | 14.88 |
| 1392 | 529 | 0.53 | 15.41 |
| 1393 | 430 | 0.43 | 15.84 |
| 1394 | 352 | 0.35 | 16.20 |
| 1395 | 332 | 0.33 | 16.53 |
| 1396 | 506 | 0.51 | 17.03 |
| 1397 | 552 | 0.55 | 17.59 |
| 1398 | 337 | 0.34 | 17.92 |
| 1399 | 734 | 0.73 | 18.66 |
| 1400 | 277 | 0.28 | 18.94 |
| 1401 | 631 | 0.63 | 19.57 |
| 1402 | 245 | 0.25 | 19.81 |
| 1403 | 848 | 0.85 | 20.66 |
| 1404 | 213 | 0.21 | 20.87 |
| 1405 | 978 | 0.98 | 21.85 |
| 1406 | 243 | 0.24 | 22.09 |
| 1407 | 506 | 0.51 | 22.60 |
| 1408 | 820 | 0.82 | 23.42 |
| 1409 | 410 | 0.41 | 23.83 |
| 1410 | 616 | 0.62 | 24.45 |
| 1411 | 777 | 0.78 | 25.23 |
| 1412 | 596 | 0.60 | 25.82 |
| 1413 | 524 | 0.52 | 26.35 |
| 1414 | 729 | 0.73 | 27.08 |
| 1415 | 752 | 0.75 | 27.83 |
| 1416 | 813 | 0.81 | 28.64 |
| 1417 | 542 | 0.54 | 29.18 |
| 1418 | 730 | 0.73 | 29.91 |
| 1419 | 733 | 0.73 | 30.65 |
| 1420 | 812 | 0.81 | 31.46 |
| 1421 | 742 | 0.74 | 32.20 |
| 1422 | 820 | 0.82 | 33.02 |
| 1423 | 787 | 0.79 | 33.81 |
| 1424 | 745 | 0.75 | 34.56 |
| 1425 | 792 | 0.79 | 35.35 |
| 1426 | 965 | 0.97 | 36.31 |
| 1427 | 700 | 0.70 | 37.01 |
| 1428 | 783 | 0.78 | 37.80 |
| 1429 | 874 | 0.87 | 38.67 |
| 1430 | 1,124 | 1.12 | 39.80 |
| 1431 | 508 | 0.51 | 40.30 |
| 1432 | 1,134 | 1.13 | 41.44 |
| 1433 | 1,092 | 1.09 | 42.53 |
| 1434 | 470 | 0.47 | 43.00 |
| 1435 | 1,152 | 1.15 | 44.15 |
| 1436 | 738 | 0.74 | 44.89 |
| 1437 | 1,052 | 1.05 | 45.95 |
| 1438 | 1,004 | 1.00 | 46.95 |
| 1439 | 637 | 0.64 | 47.59 |
| 1440 | 1,166 | 1.17 | 48.75 |
| 1441 | 894 | 0.89 | 49.65 |
| 1442 | 771 | 0.77 | 50.42 |
| 1443 | 1,096 | 1.10 | 51.52 |
| 1444 | 748 | 0.75 | 52.26 |
| 1445 | 928 | 0.93 | 53.19 |
| 1446 | 702 | 0.70 | 53.90 |
| 1447 | 1,197 | 1.20 | 55.09 |
| 1448 | 825 | 0.83 | 55.92 |
| 1449 | 998 | 1.00 | 56.92 |
| 1450 | 748 | 0.75 | 57.67 |
| 1451 | 1,029 | 1.03 | 58.70 |
| 1452 | 865 | 0.87 | 59.56 |
| 1453 | 757 | 0.76 | 60.32 |
| 1454 | 1,225 | 1.23 | 61.54 |
| 1455 | 499 | 0.50 | 62.04 |
| 1456 | 1,146 | 1.15 | 63.19 |
| 1457 | 684 | 0.68 | 63.87 |
| 1458 | 972 | 0.97 | 64.85 |
| 1459 | 400 | 0.40 | 65.25 |
| 1460 | 1,233 | 1.23 | 66.48 |
| 1461 | 578 | 0.58 | 67.06 |
| 1462 | 909 | 0.91 | 67.97 |
| 1463 | 812 | 0.81 | 68.78 |
| 1464 | 1,175 | 1.18 | 69.96 |
| 1465 | 145 | 0.15 | 70.10 |
| 1466 | 1,239 | 1.24 | 71.34 |
| 1467 | 525 | 0.53 | 71.87 |
| 1468 | 971 | 0.97 | 72.84 |
| 1469 | 208 | 0.21 | 73.05 |
| 1470 | 1,355 | 1.36 | 74.40 |
| 1471 | 576 | 0.58 | 74.98 |
| 1472 | 707 | 0.71 | 75.69 |
| 1473 | 771 | 0.77 | 76.46 |
| 1474 | 809 | 0.81 | 77.27 |
| 1475 | 740 | 0.74 | 78.01 |
| 1476 | 12 | 0.01 | 78.02 |
| 1477 | 1,208 | 1.21 | 79.23 |
| 1478 | 706 | 0.71 | 79.93 |
| 1479 | 616 | 0.62 | 80.55 |
| 1480 | 123 | 0.12 | 80.67 |
| 1481 | 1,212 | 1.21 | 81.89 |
| 1482 | 668 | 0.67 | 82.55 |
| 1483 | 196 | 0.20 | 82.75 |
| 1484 | 515 | 0.52 | 83.27 |
| 1485 | 868 | 0.87 | 84.13 |
| 1486 | 503 | 0.50 | 84.64 |
| 1487 | 302 | 0.30 | 84.94 |
| 1488 | 626 | 0.63 | 85.57 |
| 1489 | 647 | 0.65 | 86.21 |
| 1490 | 365 | 0.37 | 86.58 |
| 1491 | 420 | 0.42 | 87.00 |
| 1492 | 458 | 0.46 | 87.46 |
| 1493 | 250 | 0.25 | 87.71 |
| 1494 | 916 | 0.92 | 88.62 |
| 1495 | 121 | 0.12 | 88.74 |
| 1496 | 360 | 0.36 | 89.10 |
| 1497 | 427 | 0.43 | 89.53 |
| 1498 | 222 | 0.22 | 89.75 |
| 1499 | 372 | 0.37 | 90.13 |
| 1500 | 908 | 0.91 | 91.03 |
| 1501 | 29 | 0.03 | 91.06 |
| 1502 | 291 | 0.29 | 91.35 |
| 1503 | 257 | 0.26 | 91.61 |
| 1504 | 1 | 0.00 | 91.61 |
| 1505 | 835 | 0.84 | 92.45 |
| 1506 | 240 | 0.24 | 92.69 |
| 1507 | 259 | 0.26 | 92.95 |
| 1508 | 124 | 0.12 | 93.07 |
| 1509 | 36 | 0.04 | 93.11 |
| 1510 | 5 | 0.01 | 93.11 |
| 1511 | 1,128 | 1.13 | 94.24 |
| 1513 | 72 | 0.07 | 94.31 |
| 1515 | 210 | 0.21 | 94.52 |
| 1516 | 321 | 0.32 | 94.84 |
| 1518 | 317 | 0.32 | 95.16 |
| 1519 | 311 | 0.31 | 95.47 |
| 1520 | 9 | 0.01 | 95.48 |
| 1522 | 389 | 0.39 | 95.87 |
| 1524 | 11 | 0.01 | 95.88 |
| 1526 | 356 | 0.36 | 96.24 |
| 1528 | 328 | 0.33 | 96.57 |
| 1530 | 158 | 0.16 | 96.72 |
| 1532 | 18 | 0.02 | 96.74 |
| 1535 | 33 | 0.03 | 96.78 |
| 1536 | 285 | 0.29 | 97.06 |
| 1537 | 164 | 0.16 | 97.22 |
| 1538 | 40 | 0.04 | 97.26 |
| 1540 | 2 | 0.00 | 97.27 |
| 1541 | 45 | 0.05 | 97.31 |
| 1543 | 1 | 0.00 | 97.31 |
| 1545 | 56 | 0.06 | 97.37 |
| 1547 | 183 | 0.18 | 97.55 |
| 1549 | 68 | 0.07 | 97.62 |
| 1551 | 1 | 0.00 | 97.62 |
| 1552 | 1 | 0.00 | 97.62 |
| 1555 | 1 | 0.00 | 97.62 |
| 1556 | 112 | 0.11 | 97.73 |
| 1557 | 3 | 0.00 | 97.74 |
| 1559 | 1 | 0.00 | 97.74 |
| 1561 | 4 | 0.00 | 97.74 |
| 1562 | 5 | 0.01 | 97.75 |
| 1563 | 4 | 0.00 | 97.75 |
| 1564 | 2 | 0.00 | 97.75 |
| 1565 | 8 | 0.01 | 97.76 |
| 1566 | 120 | 0.12 | 97.88 |
| 1567 | 1 | 0.00 | 97.88 |
| 1568 | 12 | 0.01 | 97.89 |
| 1570 | 19 | 0.02 | 97.91 |
| 1571 | 1 | 0.00 | 97.91 |
| 1573 | 35 | 0.04 | 97.95 |
| 1575 | 1 | 0.00 | 97.95 |
| 1576 | 32 | 0.03 | 97.98 |
| 1577 | 6 | 0.01 | 97.99 |
| 1579 | 2 | 0.00 | 97.99 |
| 1580 | 56 | 0.06 | 98.05 |
| 1581 | 6 | 0.01 | 98.05 |
| 1583 | 59 | 0.06 | 98.11 |
| 1584 | 7 | 0.01 | 98.12 |
| 1587 | 106 | 0.11 | 98.23 |
| 1590 | 18 | 0.02 | 98.24 |
| 1591 | 145 | 0.15 | 98.39 |
| 1594 | 19 | 0.02 | 98.41 |
| 1596 | 175 | 0.18 | 98.58 |
| 1598 | 28 | 0.03 | 98.61 |
| 1601 | 188 | 0.19 | 98.80 |
| 1605 | 41 | 0.04 | 98.84 |
| 1607 | 224 | 0.22 | 99.06 |
| 1613 | 235 | 0.24 | 99.30 |
| 1615 | 59 | 0.06 | 99.36 |
| 1621 | 230 | 0.23 | 99.59 |
| 1632 | 196 | 0.20 | 99.78 |
| 1651 | 131 | 0.13 | 99.91 |
| 1700 | 85 | 0.09 | 100.00 |

Table 7.C.29 Scale Score Frequency Distribution—Overall Score, Grade Two

|  |  |  |  |
| --- | --- | --- | --- |
| **Scale Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 1150 | 180 | 0.19 | 0.19 |
| 1197 | 42 | 0.04 | 0.23 |
| 1216 | 32 | 0.03 | 0.27 |
| 1226 | 12 | 0.01 | 0.28 |
| 1228 | 64 | 0.07 | 0.34 |
| 1233 | 9 | 0.01 | 0.35 |
| 1238 | 21 | 0.02 | 0.38 |
| 1242 | 15 | 0.02 | 0.39 |
| 1243 | 45 | 0.05 | 0.44 |
| 1246 | 22 | 0.02 | 0.46 |
| 1249 | 35 | 0.04 | 0.50 |
| 1252 | 54 | 0.06 | 0.56 |
| 1254 | 21 | 0.02 | 0.58 |
| 1257 | 43 | 0.04 | 0.62 |
| 1259 | 13 | 0.01 | 0.64 |
| 1261 | 16 | 0.02 | 0.65 |
| 1262 | 17 | 0.02 | 0.67 |
| 1263 | 8 | 0.01 | 0.68 |
| 1265 | 21 | 0.02 | 0.70 |
| 1266 | 13 | 0.01 | 0.71 |
| 1268 | 21 | 0.02 | 0.74 |
| 1270 | 13 | 0.01 | 0.75 |
| 1271 | 15 | 0.02 | 0.77 |
| 1272 | 11 | 0.01 | 0.78 |
| 1273 | 38 | 0.04 | 0.82 |
| 1275 | 84 | 0.09 | 0.90 |
| 1276 | 16 | 0.02 | 0.92 |
| 1277 | 9 | 0.01 | 0.93 |
| 1278 | 14 | 0.01 | 0.94 |
| 1279 | 12 | 0.01 | 0.96 |
| 1280 | 14 | 0.01 | 0.97 |
| 1281 | 23 | 0.02 | 1.00 |
| 1282 | 5 | 0.01 | 1.00 |
| 1283 | 17 | 0.02 | 1.02 |
| 1284 | 5 | 0.01 | 1.02 |
| 1285 | 15 | 0.02 | 1.04 |
| 1286 | 5 | 0.01 | 1.05 |
| 1287 | 16 | 0.02 | 1.06 |
| 1288 | 23 | 0.02 | 1.09 |
| 1289 | 3 | 0.00 | 1.09 |
| 1290 | 75 | 0.08 | 1.17 |
| 1292 | 10 | 0.01 | 1.18 |
| 1294 | 35 | 0.04 | 1.21 |
| 1296 | 1 | 0.00 | 1.22 |
| 1297 | 16 | 0.02 | 1.23 |
| 1299 | 55 | 0.06 | 1.29 |
| 1301 | 11 | 0.01 | 1.30 |
| 1304 | 63 | 0.07 | 1.37 |
| 1306 | 1 | 0.00 | 1.37 |
| 1307 | 4 | 0.00 | 1.37 |
| 1309 | 57 | 0.06 | 1.43 |
| 1310 | 6 | 0.01 | 1.44 |
| 1311 | 16 | 0.02 | 1.46 |
| 1312 | 12 | 0.01 | 1.47 |
| 1313 | 10 | 0.01 | 1.48 |
| 1315 | 9 | 0.01 | 1.49 |
| 1316 | 17 | 0.02 | 1.51 |
| 1317 | 30 | 0.03 | 1.54 |
| 1318 | 11 | 0.01 | 1.55 |
| 1319 | 26 | 0.03 | 1.58 |
| 1320 | 24 | 0.03 | 1.60 |
| 1321 | 4 | 0.00 | 1.60 |
| 1322 | 6 | 0.01 | 1.61 |
| 1323 | 19 | 0.02 | 1.63 |
| 1324 | 25 | 0.03 | 1.66 |
| 1325 | 3 | 0.00 | 1.66 |
| 1326 | 19 | 0.02 | 1.68 |
| 1327 | 69 | 0.07 | 1.75 |
| 1328 | 4 | 0.00 | 1.76 |
| 1329 | 7 | 0.01 | 1.76 |
| 1330 | 23 | 0.02 | 1.79 |
| 1331 | 37 | 0.04 | 1.83 |
| 1332 | 15 | 0.02 | 1.84 |
| 1333 | 28 | 0.03 | 1.87 |
| 1334 | 31 | 0.03 | 1.90 |
| 1335 | 37 | 0.04 | 1.94 |
| 1336 | 12 | 0.01 | 1.95 |
| 1337 | 23 | 0.02 | 1.98 |
| 1338 | 2 | 0.00 | 1.98 |
| 1339 | 62 | 0.06 | 2.05 |
| 1340 | 21 | 0.02 | 2.07 |
| 1341 | 28 | 0.03 | 2.10 |
| 1342 | 29 | 0.03 | 2.13 |
| 1343 | 9 | 0.01 | 2.14 |
| 1344 | 72 | 0.08 | 2.21 |
| 1345 | 37 | 0.04 | 2.25 |
| 1346 | 30 | 0.03 | 2.28 |
| 1347 | 41 | 0.04 | 2.32 |
| 1348 | 40 | 0.04 | 2.37 |
| 1349 | 30 | 0.03 | 2.40 |
| 1350 | 74 | 0.08 | 2.48 |
| 1351 | 32 | 0.03 | 2.51 |
| 1352 | 18 | 0.02 | 2.53 |
| 1353 | 68 | 0.07 | 2.60 |
| 1354 | 53 | 0.06 | 2.65 |
| 1356 | 87 | 0.09 | 2.74 |
| 1357 | 26 | 0.03 | 2.77 |
| 1358 | 76 | 0.08 | 2.85 |
| 1359 | 54 | 0.06 | 2.91 |
| 1360 | 46 | 0.05 | 2.96 |
| 1361 | 98 | 0.10 | 3.06 |
| 1362 | 13 | 0.01 | 3.07 |
| 1363 | 86 | 0.09 | 3.16 |
| 1364 | 80 | 0.08 | 3.25 |
| 1365 | 73 | 0.08 | 3.32 |
| 1366 | 122 | 0.13 | 3.45 |
| 1367 | 48 | 0.05 | 3.50 |
| 1368 | 111 | 0.12 | 3.62 |
| 1369 | 98 | 0.10 | 3.72 |
| 1370 | 76 | 0.08 | 3.80 |
| 1371 | 87 | 0.09 | 3.89 |
| 1372 | 108 | 0.11 | 4.00 |
| 1373 | 95 | 0.10 | 4.10 |
| 1374 | 98 | 0.10 | 4.20 |
| 1375 | 117 | 0.12 | 4.33 |
| 1376 | 123 | 0.13 | 4.45 |
| 1377 | 142 | 0.15 | 4.60 |
| 1378 | 89 | 0.09 | 4.70 |
| 1379 | 161 | 0.17 | 4.86 |
| 1380 | 140 | 0.15 | 5.01 |
| 1381 | 145 | 0.15 | 5.16 |
| 1382 | 108 | 0.11 | 5.27 |
| 1383 | 139 | 0.15 | 5.42 |
| 1384 | 83 | 0.09 | 5.51 |
| 1385 | 188 | 0.20 | 5.70 |
| 1386 | 123 | 0.13 | 5.83 |
| 1387 | 116 | 0.12 | 5.95 |
| 1388 | 158 | 0.17 | 6.12 |
| 1389 | 83 | 0.09 | 6.20 |
| 1390 | 206 | 0.22 | 6.42 |
| 1391 | 143 | 0.15 | 6.57 |
| 1392 | 151 | 0.16 | 6.73 |
| 1393 | 154 | 0.16 | 6.89 |
| 1394 | 157 | 0.16 | 7.05 |
| 1395 | 236 | 0.25 | 7.30 |
| 1396 | 164 | 0.17 | 7.47 |
| 1397 | 184 | 0.19 | 7.66 |
| 1398 | 197 | 0.21 | 7.87 |
| 1399 | 155 | 0.16 | 8.03 |
| 1400 | 278 | 0.29 | 8.32 |
| 1401 | 134 | 0.14 | 8.46 |
| 1402 | 206 | 0.22 | 8.68 |
| 1403 | 259 | 0.27 | 8.95 |
| 1404 | 176 | 0.18 | 9.13 |
| 1405 | 306 | 0.32 | 9.45 |
| 1406 | 225 | 0.24 | 9.69 |
| 1407 | 261 | 0.27 | 9.96 |
| 1408 | 317 | 0.33 | 10.29 |
| 1409 | 143 | 0.15 | 10.44 |
| 1410 | 419 | 0.44 | 10.88 |
| 1411 | 148 | 0.15 | 11.03 |
| 1412 | 372 | 0.39 | 11.42 |
| 1413 | 375 | 0.39 | 11.81 |
| 1414 | 236 | 0.25 | 12.06 |
| 1415 | 480 | 0.50 | 12.56 |
| 1416 | 129 | 0.13 | 12.70 |
| 1417 | 538 | 0.56 | 13.26 |
| 1418 | 204 | 0.21 | 13.47 |
| 1419 | 478 | 0.50 | 13.97 |
| 1420 | 348 | 0.36 | 14.34 |
| 1421 | 310 | 0.32 | 14.66 |
| 1422 | 599 | 0.63 | 15.29 |
| 1423 | 186 | 0.19 | 15.48 |
| 1424 | 561 | 0.59 | 16.07 |
| 1425 | 448 | 0.47 | 16.54 |
| 1426 | 414 | 0.43 | 16.97 |
| 1427 | 476 | 0.50 | 17.47 |
| 1428 | 400 | 0.42 | 17.88 |
| 1429 | 562 | 0.59 | 18.47 |
| 1430 | 414 | 0.43 | 18.90 |
| 1431 | 560 | 0.59 | 19.49 |
| 1432 | 578 | 0.60 | 20.09 |
| 1433 | 434 | 0.45 | 20.55 |
| 1434 | 577 | 0.60 | 21.15 |
| 1435 | 582 | 0.61 | 21.76 |
| 1436 | 542 | 0.57 | 22.33 |
| 1437 | 628 | 0.66 | 22.98 |
| 1438 | 554 | 0.58 | 23.56 |
| 1439 | 485 | 0.51 | 24.07 |
| 1440 | 667 | 0.70 | 24.77 |
| 1441 | 694 | 0.73 | 25.49 |
| 1442 | 482 | 0.50 | 25.99 |
| 1443 | 604 | 0.63 | 26.63 |
| 1444 | 669 | 0.70 | 27.32 |
| 1445 | 836 | 0.87 | 28.20 |
| 1446 | 413 | 0.43 | 28.63 |
| 1447 | 781 | 0.82 | 29.45 |
| 1448 | 771 | 0.81 | 30.25 |
| 1449 | 697 | 0.73 | 30.98 |
| 1450 | 802 | 0.84 | 31.82 |
| 1451 | 511 | 0.53 | 32.35 |
| 1452 | 797 | 0.83 | 33.19 |
| 1453 | 725 | 0.76 | 33.94 |
| 1454 | 764 | 0.80 | 34.74 |
| 1455 | 737 | 0.77 | 35.51 |
| 1456 | 549 | 0.57 | 36.09 |
| 1457 | 1,159 | 1.21 | 37.30 |
| 1458 | 513 | 0.54 | 37.84 |
| 1459 | 1,092 | 1.14 | 38.98 |
| 1460 | 510 | 0.53 | 39.51 |
| 1461 | 876 | 0.92 | 40.43 |
| 1462 | 799 | 0.84 | 41.26 |
| 1463 | 609 | 0.64 | 41.90 |
| 1464 | 1,024 | 1.07 | 42.97 |
| 1465 | 536 | 0.56 | 43.53 |
| 1466 | 944 | 0.99 | 44.51 |
| 1467 | 1,017 | 1.06 | 45.58 |
| 1468 | 504 | 0.53 | 46.10 |
| 1469 | 1,189 | 1.24 | 47.35 |
| 1470 | 565 | 0.59 | 47.94 |
| 1471 | 660 | 0.69 | 48.63 |
| 1472 | 1,169 | 1.22 | 49.85 |
| 1473 | 715 | 0.75 | 50.60 |
| 1474 | 424 | 0.44 | 51.04 |
| 1475 | 1,205 | 1.26 | 52.30 |
| 1476 | 473 | 0.49 | 52.79 |
| 1477 | 1,253 | 1.31 | 54.10 |
| 1478 | 585 | 0.61 | 54.72 |
| 1479 | 912 | 0.95 | 55.67 |
| 1480 | 686 | 0.72 | 56.39 |
| 1481 | 852 | 0.89 | 57.28 |
| 1482 | 597 | 0.62 | 57.90 |
| 1483 | 1,057 | 1.10 | 59.01 |
| 1484 | 1,040 | 1.09 | 60.09 |
| 1485 | 571 | 0.60 | 60.69 |
| 1486 | 505 | 0.53 | 61.22 |
| 1487 | 1,432 | 1.50 | 62.71 |
| 1488 | 660 | 0.69 | 63.40 |
| 1489 | 431 | 0.45 | 63.85 |
| 1490 | 684 | 0.71 | 64.57 |
| 1491 | 1,251 | 1.31 | 65.88 |
| 1492 | 623 | 0.65 | 66.53 |
| 1493 | 425 | 0.44 | 66.97 |
| 1494 | 1,181 | 1.23 | 68.21 |
| 1495 | 830 | 0.87 | 69.08 |
| 1496 | 410 | 0.43 | 69.50 |
| 1497 | 600 | 0.63 | 70.13 |
| 1498 | 1,389 | 1.45 | 71.58 |
| 1499 | 22 | 0.02 | 71.61 |
| 1500 | 1,195 | 1.25 | 72.85 |
| 1501 | 84 | 0.09 | 72.94 |
| 1502 | 1,118 | 1.17 | 74.11 |
| 1503 | 1,161 | 1.21 | 75.32 |
| 1504 | 38 | 0.04 | 75.36 |
| 1505 | 686 | 0.72 | 76.08 |
| 1506 | 638 | 0.67 | 76.75 |
| 1507 | 966 | 1.01 | 77.76 |
| 1508 | 692 | 0.72 | 78.48 |
| 1509 | 69 | 0.07 | 78.55 |
| 1510 | 447 | 0.47 | 79.02 |
| 1511 | 1,187 | 1.24 | 80.26 |
| 1512 | 688 | 0.72 | 80.98 |
| 1513 | 21 | 0.02 | 81.00 |
| 1514 | 688 | 0.72 | 81.72 |
| 1515 | 199 | 0.21 | 81.93 |
| 1516 | 1,132 | 1.18 | 83.11 |
| 1518 | 1,075 | 1.12 | 84.24 |
| 1519 | 166 | 0.17 | 84.41 |
| 1520 | 39 | 0.04 | 84.45 |
| 1521 | 872 | 0.91 | 85.36 |
| 1522 | 869 | 0.91 | 86.27 |
| 1523 | 397 | 0.41 | 86.69 |
| 1524 | 5 | 0.01 | 86.69 |
| 1525 | 363 | 0.38 | 87.07 |
| 1526 | 178 | 0.19 | 87.26 |
| 1527 | 831 | 0.87 | 88.13 |
| 1528 | 505 | 0.53 | 88.65 |
| 1529 | 580 | 0.61 | 89.26 |
| 1530 | 50 | 0.05 | 89.31 |
| 1531 | 52 | 0.05 | 89.37 |
| 1532 | 445 | 0.47 | 89.83 |
| 1533 | 674 | 0.70 | 90.54 |
| 1534 | 391 | 0.41 | 90.94 |
| 1535 | 157 | 0.16 | 91.11 |
| 1536 | 6 | 0.01 | 91.12 |
| 1537 | 696 | 0.73 | 91.84 |
| 1538 | 211 | 0.22 | 92.06 |
| 1539 | 11 | 0.01 | 92.07 |
| 1540 | 422 | 0.44 | 92.52 |
| 1541 | 150 | 0.16 | 92.67 |
| 1542 | 403 | 0.42 | 93.09 |
| 1543 | 405 | 0.42 | 93.52 |
| 1544 | 12 | 0.01 | 93.53 |
| 1545 | 151 | 0.16 | 93.69 |
| 1546 | 200 | 0.21 | 93.90 |
| 1548 | 21 | 0.02 | 93.92 |
| 1549 | 520 | 0.54 | 94.46 |
| 1550 | 381 | 0.40 | 94.86 |
| 1551 | 211 | 0.22 | 95.08 |
| 1553 | 29 | 0.03 | 95.11 |
| 1554 | 211 | 0.22 | 95.33 |
| 1556 | 292 | 0.31 | 95.64 |
| 1558 | 339 | 0.35 | 95.99 |
| 1559 | 46 | 0.05 | 96.04 |
| 1560 | 261 | 0.27 | 96.31 |
| 1561 | 1 | 0.00 | 96.31 |
| 1562 | 342 | 0.36 | 96.67 |
| 1563 | 1 | 0.00 | 96.67 |
| 1564 | 1 | 0.00 | 96.67 |
| 1565 | 1 | 0.00 | 96.67 |
| 1566 | 96 | 0.10 | 96.77 |
| 1568 | 2 | 0.00 | 96.78 |
| 1569 | 258 | 0.27 | 97.05 |
| 1570 | 346 | 0.36 | 97.41 |
| 1571 | 1 | 0.00 | 97.41 |
| 1572 | 2 | 0.00 | 97.41 |
| 1574 | 5 | 0.01 | 97.42 |
| 1575 | 135 | 0.14 | 97.56 |
| 1576 | 9 | 0.01 | 97.57 |
| 1577 | 276 | 0.29 | 97.86 |
| 1578 | 2 | 0.00 | 97.86 |
| 1579 | 10 | 0.01 | 97.87 |
| 1581 | 150 | 0.16 | 98.02 |
| 1582 | 16 | 0.02 | 98.04 |
| 1583 | 5 | 0.01 | 98.05 |
| 1585 | 18 | 0.02 | 98.07 |
| 1588 | 25 | 0.03 | 98.09 |
| 1589 | 222 | 0.23 | 98.32 |
| 1590 | 10 | 0.01 | 98.33 |
| 1591 | 151 | 0.16 | 98.49 |
| 1592 | 26 | 0.03 | 98.52 |
| 1593 | 10 | 0.01 | 98.53 |
| 1596 | 54 | 0.06 | 98.59 |
| 1599 | 22 | 0.02 | 98.61 |
| 1600 | 52 | 0.05 | 98.66 |
| 1603 | 27 | 0.03 | 98.69 |
| 1604 | 71 | 0.07 | 98.77 |
| 1607 | 31 | 0.03 | 98.80 |
| 1610 | 245 | 0.26 | 99.05 |
| 1612 | 44 | 0.05 | 99.10 |
| 1615 | 120 | 0.13 | 99.23 |
| 1618 | 58 | 0.06 | 99.29 |
| 1622 | 108 | 0.11 | 99.40 |
| 1628 | 61 | 0.06 | 99.46 |
| 1631 | 141 | 0.15 | 99.61 |
| 1642 | 149 | 0.16 | 99.77 |
| 1647 | 72 | 0.08 | 99.84 |
| 1663 | 99 | 0.10 | 99.94 |
| 1700 | 53 | 0.06 | 100.00 |

Table 7.C.30 Scale Score Frequency Distribution—Overall Score, Grade Three

|  |  |  |  |
| --- | --- | --- | --- |
| **Scale Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 1150 | 1 | 0.00 | 0.00 |
| 1232 | 2 | 0.00 | 0.00 |
| 1238 | 1 | 0.00 | 0.00 |
| 1247 | 1 | 0.00 | 0.01 |
| 1251 | 1 | 0.00 | 0.01 |
| 1255 | 2 | 0.00 | 0.01 |
| 1256 | 3 | 0.00 | 0.01 |
| 1258 | 1 | 0.00 | 0.01 |
| 1286 | 1 | 0.00 | 0.01 |
| 1288 | 2 | 0.00 | 0.02 |
| 1294 | 1 | 0.00 | 0.02 |
| 1300 | 3 | 0.00 | 0.02 |
| 1304 | 2 | 0.00 | 0.02 |
| 1306 | 1 | 0.00 | 0.02 |
| 1314 | 2 | 0.00 | 0.02 |
| 1315 | 1 | 0.00 | 0.03 |
| 1318 | 2 | 0.00 | 0.03 |
| 1319 | 1 | 0.00 | 0.03 |
| 1320 | 1 | 0.00 | 0.03 |
| 1322 | 4 | 0.00 | 0.03 |
| 1324 | 2 | 0.00 | 0.04 |
| 1327 | 2 | 0.00 | 0.04 |
| 1329 | 2 | 0.00 | 0.04 |
| 1330 | 1 | 0.00 | 0.04 |
| 1331 | 10 | 0.01 | 0.05 |
| 1333 | 4 | 0.00 | 0.06 |
| 1335 | 3 | 0.00 | 0.06 |
| 1336 | 4 | 0.00 | 0.06 |
| 1337 | 3 | 0.00 | 0.07 |
| 1338 | 6 | 0.01 | 0.07 |
| 1340 | 5 | 0.01 | 0.08 |
| 1341 | 4 | 0.00 | 0.08 |
| 1342 | 7 | 0.01 | 0.09 |
| 1344 | 6 | 0.01 | 0.09 |
| 1346 | 10 | 0.01 | 0.10 |
| 1347 | 11 | 0.01 | 0.12 |
| 1348 | 10 | 0.01 | 0.13 |
| 1349 | 18 | 0.02 | 0.14 |
| 1352 | 9 | 0.01 | 0.15 |
| 1353 | 12 | 0.01 | 0.17 |
| 1354 | 35 | 0.04 | 0.20 |
| 1356 | 40 | 0.04 | 0.24 |
| 1357 | 10 | 0.01 | 0.25 |
| 1358 | 4 | 0.00 | 0.26 |
| 1359 | 15 | 0.02 | 0.27 |
| 1360 | 84 | 0.09 | 0.36 |
| 1361 | 7 | 0.01 | 0.36 |
| 1363 | 42 | 0.04 | 0.41 |
| 1364 | 51 | 0.05 | 0.46 |
| 1365 | 34 | 0.03 | 0.49 |
| 1366 | 61 | 0.06 | 0.56 |
| 1367 | 76 | 0.08 | 0.63 |
| 1369 | 55 | 0.06 | 0.69 |
| 1370 | 72 | 0.07 | 0.76 |
| 1371 | 102 | 0.10 | 0.87 |
| 1372 | 12 | 0.01 | 0.88 |
| 1373 | 95 | 0.10 | 0.98 |
| 1374 | 34 | 0.03 | 1.01 |
| 1375 | 130 | 0.13 | 1.14 |
| 1376 | 48 | 0.05 | 1.19 |
| 1377 | 92 | 0.09 | 1.29 |
| 1378 | 91 | 0.09 | 1.38 |
| 1379 | 137 | 0.14 | 1.52 |
| 1380 | 79 | 0.08 | 1.60 |
| 1381 | 10 | 0.01 | 1.61 |
| 1382 | 264 | 0.27 | 1.88 |
| 1383 | 62 | 0.06 | 1.94 |
| 1384 | 11 | 0.01 | 1.96 |
| 1385 | 168 | 0.17 | 2.13 |
| 1386 | 193 | 0.20 | 2.32 |
| 1387 | 91 | 0.09 | 2.42 |
| 1388 | 52 | 0.05 | 2.47 |
| 1389 | 122 | 0.12 | 2.60 |
| 1390 | 184 | 0.19 | 2.78 |
| 1391 | 85 | 0.09 | 2.87 |
| 1392 | 39 | 0.04 | 2.91 |
| 1393 | 246 | 0.25 | 3.16 |
| 1394 | 86 | 0.09 | 3.25 |
| 1395 | 142 | 0.15 | 3.39 |
| 1396 | 121 | 0.12 | 3.52 |
| 1397 | 98 | 0.10 | 3.62 |
| 1398 | 91 | 0.09 | 3.71 |
| 1399 | 220 | 0.22 | 3.94 |
| 1400 | 50 | 0.05 | 3.99 |
| 1401 | 137 | 0.14 | 4.13 |
| 1402 | 185 | 0.19 | 4.32 |
| 1403 | 96 | 0.10 | 4.41 |
| 1404 | 210 | 0.21 | 4.63 |
| 1405 | 92 | 0.09 | 4.72 |
| 1406 | 147 | 0.15 | 4.87 |
| 1407 | 194 | 0.20 | 5.07 |
| 1408 | 150 | 0.15 | 5.22 |
| 1409 | 117 | 0.12 | 5.34 |
| 1410 | 235 | 0.24 | 5.58 |
| 1411 | 88 | 0.09 | 5.67 |
| 1412 | 255 | 0.26 | 5.93 |
| 1413 | 128 | 0.13 | 6.06 |
| 1414 | 199 | 0.20 | 6.27 |
| 1415 | 208 | 0.21 | 6.48 |
| 1416 | 163 | 0.17 | 6.65 |
| 1417 | 335 | 0.34 | 6.99 |
| 1418 | 65 | 0.07 | 7.05 |
| 1419 | 330 | 0.34 | 7.39 |
| 1420 | 125 | 0.13 | 7.52 |
| 1421 | 319 | 0.33 | 7.85 |
| 1422 | 134 | 0.14 | 7.98 |
| 1423 | 292 | 0.30 | 8.28 |
| 1424 | 232 | 0.24 | 8.52 |
| 1425 | 287 | 0.29 | 8.81 |
| 1426 | 288 | 0.29 | 9.10 |
| 1427 | 302 | 0.31 | 9.41 |
| 1428 | 350 | 0.36 | 9.77 |
| 1429 | 281 | 0.29 | 10.06 |
| 1430 | 247 | 0.25 | 10.31 |
| 1431 | 355 | 0.36 | 10.67 |
| 1432 | 327 | 0.33 | 11.01 |
| 1433 | 420 | 0.43 | 11.44 |
| 1434 | 421 | 0.43 | 11.87 |
| 1435 | 408 | 0.42 | 12.28 |
| 1436 | 370 | 0.38 | 12.66 |
| 1437 | 627 | 0.64 | 13.30 |
| 1438 | 258 | 0.26 | 13.56 |
| 1439 | 501 | 0.51 | 14.08 |
| 1440 | 542 | 0.55 | 14.63 |
| 1441 | 374 | 0.38 | 15.01 |
| 1442 | 477 | 0.49 | 15.50 |
| 1443 | 533 | 0.54 | 16.04 |
| 1444 | 550 | 0.56 | 16.60 |
| 1445 | 605 | 0.62 | 17.22 |
| 1446 | 526 | 0.54 | 17.76 |
| 1447 | 529 | 0.54 | 18.30 |
| 1448 | 794 | 0.81 | 19.11 |
| 1449 | 554 | 0.57 | 19.68 |
| 1450 | 479 | 0.49 | 20.17 |
| 1451 | 952 | 0.97 | 21.14 |
| 1452 | 559 | 0.57 | 21.71 |
| 1453 | 445 | 0.45 | 22.16 |
| 1454 | 1,192 | 1.22 | 23.38 |
| 1455 | 147 | 0.15 | 23.53 |
| 1456 | 1,520 | 1.55 | 25.08 |
| 1457 | 261 | 0.27 | 25.35 |
| 1458 | 293 | 0.30 | 25.65 |
| 1459 | 1,540 | 1.57 | 27.22 |
| 1460 | 225 | 0.23 | 27.45 |
| 1461 | 1,066 | 1.09 | 28.54 |
| 1462 | 680 | 0.69 | 29.24 |
| 1463 | 981 | 1.00 | 30.24 |
| 1464 | 925 | 0.94 | 31.18 |
| 1465 | 728 | 0.74 | 31.93 |
| 1466 | 747 | 0.76 | 32.69 |
| 1467 | 819 | 0.84 | 33.53 |
| 1468 | 1,056 | 1.08 | 34.60 |
| 1469 | 710 | 0.73 | 35.33 |
| 1470 | 1,108 | 1.13 | 36.46 |
| 1471 | 841 | 0.86 | 37.32 |
| 1472 | 769 | 0.79 | 38.11 |
| 1473 | 1,035 | 1.06 | 39.16 |
| 1474 | 838 | 0.86 | 40.02 |
| 1475 | 819 | 0.84 | 40.85 |
| 1476 | 938 | 0.96 | 41.81 |
| 1477 | 996 | 1.02 | 42.83 |
| 1478 | 1,075 | 1.10 | 43.93 |
| 1479 | 784 | 0.80 | 44.73 |
| 1480 | 1,106 | 1.13 | 45.86 |
| 1481 | 932 | 0.95 | 46.81 |
| 1482 | 802 | 0.82 | 47.63 |
| 1483 | 769 | 0.79 | 48.41 |
| 1484 | 1,153 | 1.18 | 49.59 |
| 1485 | 1,068 | 1.09 | 50.68 |
| 1486 | 694 | 0.71 | 51.39 |
| 1487 | 1,118 | 1.14 | 52.53 |
| 1488 | 922 | 0.94 | 53.48 |
| 1489 | 978 | 1.00 | 54.47 |
| 1490 | 416 | 0.42 | 54.90 |
| 1491 | 1,140 | 1.16 | 56.06 |
| 1492 | 1,035 | 1.06 | 57.12 |
| 1493 | 1,059 | 1.08 | 58.20 |
| 1494 | 692 | 0.71 | 58.91 |
| 1495 | 937 | 0.96 | 59.87 |
| 1496 | 1,266 | 1.29 | 61.16 |
| 1497 | 29 | 0.03 | 61.19 |
| 1498 | 1,364 | 1.39 | 62.58 |
| 1499 | 679 | 0.69 | 63.28 |
| 1500 | 1,096 | 1.12 | 64.40 |
| 1501 | 900 | 0.92 | 65.31 |
| 1502 | 551 | 0.56 | 65.88 |
| 1503 | 1,240 | 1.27 | 67.14 |
| 1504 | 298 | 0.30 | 67.45 |
| 1505 | 1,111 | 1.13 | 68.58 |
| 1506 | 611 | 0.62 | 69.21 |
| 1507 | 1,070 | 1.09 | 70.30 |
| 1508 | 743 | 0.76 | 71.06 |
| 1509 | 413 | 0.42 | 71.48 |
| 1510 | 1,182 | 1.21 | 72.69 |
| 1511 | 337 | 0.34 | 73.03 |
| 1512 | 939 | 0.96 | 73.99 |
| 1513 | 632 | 0.65 | 74.64 |
| 1514 | 984 | 1.01 | 75.64 |
| 1515 | 575 | 0.59 | 76.23 |
| 1516 | 688 | 0.70 | 76.93 |
| 1517 | 859 | 0.88 | 77.81 |
| 1518 | 329 | 0.34 | 78.14 |
| 1519 | 403 | 0.41 | 78.56 |
| 1520 | 1,033 | 1.06 | 79.61 |
| 1521 | 738 | 0.75 | 80.37 |
| 1522 | 684 | 0.70 | 81.06 |
| 1523 | 417 | 0.43 | 81.49 |
| 1524 | 937 | 0.96 | 82.45 |
| 1525 | 373 | 0.38 | 82.83 |
| 1526 | 180 | 0.18 | 83.01 |
| 1527 | 1,102 | 1.13 | 84.14 |
| 1528 | 466 | 0.48 | 84.61 |
| 1529 | 100 | 0.10 | 84.72 |
| 1530 | 824 | 0.84 | 85.56 |
| 1531 | 348 | 0.36 | 85.91 |
| 1532 | 636 | 0.65 | 86.56 |
| 1533 | 479 | 0.49 | 87.05 |
| 1534 | 159 | 0.16 | 87.21 |
| 1535 | 715 | 0.73 | 87.94 |
| 1536 | 609 | 0.62 | 88.57 |
| 1537 | 50 | 0.05 | 88.62 |
| 1538 | 657 | 0.67 | 89.29 |
| 1539 | 307 | 0.31 | 89.60 |
| 1540 | 299 | 0.31 | 89.91 |
| 1541 | 452 | 0.46 | 90.37 |
| 1542 | 254 | 0.26 | 90.63 |
| 1543 | 8 | 0.01 | 90.64 |
| 1544 | 871 | 0.89 | 91.53 |
| 1545 | 249 | 0.25 | 91.78 |
| 1546 | 264 | 0.27 | 92.05 |
| 1547 | 34 | 0.03 | 92.08 |
| 1548 | 528 | 0.54 | 92.62 |
| 1549 | 424 | 0.43 | 93.06 |
| 1550 | 12 | 0.01 | 93.07 |
| 1551 | 311 | 0.32 | 93.39 |
| 1552 | 201 | 0.21 | 93.59 |
| 1553 | 161 | 0.16 | 93.76 |
| 1554 | 283 | 0.29 | 94.05 |
| 1555 | 207 | 0.21 | 94.26 |
| 1556 | 321 | 0.33 | 94.58 |
| 1557 | 12 | 0.01 | 94.60 |
| 1558 | 194 | 0.20 | 94.80 |
| 1559 | 357 | 0.36 | 95.16 |
| 1560 | 164 | 0.17 | 95.33 |
| 1561 | 41 | 0.04 | 95.37 |
| 1562 | 144 | 0.15 | 95.52 |
| 1563 | 300 | 0.31 | 95.82 |
| 1564 | 171 | 0.17 | 96.00 |
| 1566 | 185 | 0.19 | 96.19 |
| 1567 | 1 | 0.00 | 96.19 |
| 1568 | 216 | 0.22 | 96.41 |
| 1569 | 331 | 0.34 | 96.75 |
| 1570 | 36 | 0.04 | 96.78 |
| 1571 | 51 | 0.05 | 96.83 |
| 1572 | 137 | 0.14 | 96.97 |
| 1573 | 168 | 0.17 | 97.15 |
| 1574 | 74 | 0.08 | 97.22 |
| 1575 | 72 | 0.07 | 97.30 |
| 1576 | 41 | 0.04 | 97.34 |
| 1577 | 182 | 0.19 | 97.52 |
| 1578 | 116 | 0.12 | 97.64 |
| 1580 | 85 | 0.09 | 97.73 |
| 1582 | 176 | 0.18 | 97.91 |
| 1583 | 206 | 0.21 | 98.12 |
| 1585 | 5 | 0.01 | 98.12 |
| 1587 | 180 | 0.18 | 98.31 |
| 1589 | 40 | 0.04 | 98.35 |
| 1590 | 50 | 0.05 | 98.40 |
| 1591 | 97 | 0.10 | 98.50 |
| 1592 | 18 | 0.02 | 98.52 |
| 1593 | 69 | 0.07 | 98.59 |
| 1594 | 6 | 0.01 | 98.59 |
| 1595 | 97 | 0.10 | 98.69 |
| 1596 | 10 | 0.01 | 98.70 |
| 1597 | 30 | 0.03 | 98.73 |
| 1598 | 21 | 0.02 | 98.75 |
| 1599 | 17 | 0.02 | 98.77 |
| 1600 | 120 | 0.12 | 98.89 |
| 1601 | 15 | 0.02 | 98.91 |
| 1603 | 19 | 0.02 | 98.93 |
| 1605 | 75 | 0.08 | 99.01 |
| 1606 | 44 | 0.04 | 99.05 |
| 1607 | 41 | 0.04 | 99.09 |
| 1609 | 24 | 0.02 | 99.12 |
| 1611 | 94 | 0.10 | 99.21 |
| 1614 | 34 | 0.03 | 99.25 |
| 1616 | 21 | 0.02 | 99.27 |
| 1617 | 91 | 0.09 | 99.36 |
| 1619 | 7 | 0.01 | 99.37 |
| 1621 | 44 | 0.04 | 99.41 |
| 1624 | 64 | 0.07 | 99.48 |
| 1625 | 1 | 0.00 | 99.48 |
| 1626 | 1 | 0.00 | 99.48 |
| 1627 | 4 | 0.00 | 99.49 |
| 1628 | 47 | 0.05 | 99.53 |
| 1629 | 10 | 0.01 | 99.54 |
| 1630 | 3 | 0.00 | 99.55 |
| 1632 | 1 | 0.00 | 99.55 |
| 1633 | 50 | 0.05 | 99.60 |
| 1634 | 20 | 0.02 | 99.62 |
| 1636 | 2 | 0.00 | 99.62 |
| 1637 | 34 | 0.03 | 99.66 |
| 1639 | 1 | 0.00 | 99.66 |
| 1640 | 2 | 0.00 | 99.66 |
| 1641 | 4 | 0.00 | 99.66 |
| 1642 | 33 | 0.03 | 99.70 |
| 1643 | 1 | 0.00 | 99.70 |
| 1646 | 3 | 0.00 | 99.70 |
| 1647 | 12 | 0.01 | 99.71 |
| 1648 | 33 | 0.03 | 99.75 |
| 1650 | 6 | 0.01 | 99.75 |
| 1653 | 2 | 0.00 | 99.76 |
| 1655 | 31 | 0.03 | 99.79 |
| 1658 | 2 | 0.00 | 99.79 |
| 1661 | 8 | 0.01 | 99.80 |
| 1662 | 22 | 0.02 | 99.82 |
| 1664 | 10 | 0.01 | 99.83 |
| 1667 | 13 | 0.01 | 99.84 |
| 1668 | 2 | 0.00 | 99.85 |
| 1670 | 10 | 0.01 | 99.86 |
| 1671 | 19 | 0.02 | 99.88 |
| 1674 | 12 | 0.01 | 99.89 |
| 1678 | 12 | 0.01 | 99.90 |
| 1682 | 10 | 0.01 | 99.91 |
| 1684 | 6 | 0.01 | 99.92 |
| 1687 | 14 | 0.01 | 99.93 |
| 1692 | 19 | 0.02 | 99.95 |
| 1695 | 2 | 0.00 | 99.95 |
| 1698 | 7 | 0.01 | 99.96 |
| 1704 | 14 | 0.01 | 99.97 |
| 1705 | 4 | 0.00 | 99.98 |
| 1711 | 8 | 0.01 | 99.99 |
| 1713 | 1 | 0.00 | 99.99 |
| 1721 | 4 | 0.00 | 99.99 |
| 1734 | 4 | 0.00 | 99.99 |
| 1750 | 2 | 0.00 | 100.00 |
| 1755 | 2 | 0.00 | 100.00 |
| 1800 | 1 | 0.00 | 100.00 |

Table 7.C.31 Scale Score Frequency Distribution—Overall Score, Grade Four

|  |  |  |  |
| --- | --- | --- | --- |
| **Scale Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 1150 | 2 | 0.00 | 0.00 |
| 1247 | 1 | 0.00 | 0.00 |
| 1251 | 1 | 0.00 | 0.00 |
| 1258 | 2 | 0.00 | 0.01 |
| 1278 | 1 | 0.00 | 0.01 |
| 1286 | 3 | 0.00 | 0.01 |
| 1294 | 1 | 0.00 | 0.01 |
| 1306 | 1 | 0.00 | 0.01 |
| 1311 | 5 | 0.01 | 0.02 |
| 1315 | 1 | 0.00 | 0.02 |
| 1320 | 2 | 0.00 | 0.02 |
| 1322 | 2 | 0.00 | 0.02 |
| 1327 | 1 | 0.00 | 0.02 |
| 1329 | 2 | 0.00 | 0.03 |
| 1330 | 2 | 0.00 | 0.03 |
| 1331 | 5 | 0.01 | 0.03 |
| 1335 | 3 | 0.00 | 0.04 |
| 1336 | 3 | 0.00 | 0.04 |
| 1337 | 1 | 0.00 | 0.04 |
| 1338 | 10 | 0.01 | 0.05 |
| 1340 | 10 | 0.01 | 0.06 |
| 1341 | 3 | 0.00 | 0.07 |
| 1342 | 10 | 0.01 | 0.08 |
| 1344 | 15 | 0.02 | 0.09 |
| 1346 | 7 | 0.01 | 0.10 |
| 1347 | 14 | 0.01 | 0.11 |
| 1348 | 6 | 0.01 | 0.12 |
| 1349 | 11 | 0.01 | 0.13 |
| 1352 | 15 | 0.02 | 0.15 |
| 1353 | 14 | 0.01 | 0.16 |
| 1354 | 19 | 0.02 | 0.18 |
| 1356 | 33 | 0.04 | 0.22 |
| 1357 | 7 | 0.01 | 0.23 |
| 1358 | 6 | 0.01 | 0.23 |
| 1359 | 17 | 0.02 | 0.25 |
| 1360 | 55 | 0.06 | 0.31 |
| 1361 | 11 | 0.01 | 0.32 |
| 1363 | 34 | 0.04 | 0.36 |
| 1364 | 49 | 0.05 | 0.41 |
| 1365 | 25 | 0.03 | 0.44 |
| 1366 | 45 | 0.05 | 0.48 |
| 1367 | 42 | 0.04 | 0.53 |
| 1369 | 42 | 0.04 | 0.57 |
| 1370 | 55 | 0.06 | 0.63 |
| 1371 | 82 | 0.09 | 0.72 |
| 1372 | 12 | 0.01 | 0.73 |
| 1373 | 76 | 0.08 | 0.81 |
| 1374 | 39 | 0.04 | 0.85 |
| 1375 | 93 | 0.10 | 0.95 |
| 1376 | 33 | 0.04 | 0.99 |
| 1377 | 63 | 0.07 | 1.05 |
| 1378 | 75 | 0.08 | 1.13 |
| 1379 | 110 | 0.12 | 1.25 |
| 1380 | 50 | 0.05 | 1.30 |
| 1381 | 4 | 0.00 | 1.31 |
| 1382 | 257 | 0.27 | 1.58 |
| 1383 | 52 | 0.06 | 1.63 |
| 1384 | 14 | 0.01 | 1.65 |
| 1385 | 117 | 0.12 | 1.77 |
| 1386 | 164 | 0.17 | 1.95 |
| 1387 | 81 | 0.09 | 2.03 |
| 1388 | 50 | 0.05 | 2.09 |
| 1389 | 101 | 0.11 | 2.19 |
| 1390 | 175 | 0.19 | 2.38 |
| 1391 | 62 | 0.07 | 2.44 |
| 1392 | 18 | 0.02 | 2.46 |
| 1393 | 177 | 0.19 | 2.65 |
| 1394 | 72 | 0.08 | 2.73 |
| 1395 | 117 | 0.12 | 2.85 |
| 1396 | 92 | 0.10 | 2.95 |
| 1397 | 63 | 0.07 | 3.02 |
| 1398 | 62 | 0.07 | 3.08 |
| 1399 | 149 | 0.16 | 3.24 |
| 1400 | 26 | 0.03 | 3.27 |
| 1401 | 86 | 0.09 | 3.36 |
| 1402 | 157 | 0.17 | 3.53 |
| 1403 | 50 | 0.05 | 3.58 |
| 1404 | 133 | 0.14 | 3.72 |
| 1405 | 63 | 0.07 | 3.79 |
| 1406 | 81 | 0.09 | 3.87 |
| 1407 | 113 | 0.12 | 3.99 |
| 1408 | 76 | 0.08 | 4.07 |
| 1409 | 83 | 0.09 | 4.16 |
| 1410 | 133 | 0.14 | 4.30 |
| 1411 | 65 | 0.07 | 4.37 |
| 1412 | 163 | 0.17 | 4.54 |
| 1413 | 52 | 0.06 | 4.60 |
| 1414 | 106 | 0.11 | 4.71 |
| 1415 | 114 | 0.12 | 4.83 |
| 1416 | 93 | 0.10 | 4.93 |
| 1417 | 197 | 0.21 | 5.14 |
| 1418 | 33 | 0.04 | 5.18 |
| 1419 | 188 | 0.20 | 5.38 |
| 1420 | 63 | 0.07 | 5.44 |
| 1421 | 147 | 0.16 | 5.60 |
| 1422 | 74 | 0.08 | 5.68 |
| 1423 | 152 | 0.16 | 5.84 |
| 1424 | 142 | 0.15 | 5.99 |
| 1425 | 131 | 0.14 | 6.13 |
| 1426 | 158 | 0.17 | 6.30 |
| 1427 | 141 | 0.15 | 6.45 |
| 1428 | 152 | 0.16 | 6.61 |
| 1429 | 164 | 0.17 | 6.78 |
| 1430 | 119 | 0.13 | 6.91 |
| 1431 | 154 | 0.16 | 7.07 |
| 1432 | 140 | 0.15 | 7.22 |
| 1433 | 179 | 0.19 | 7.41 |
| 1434 | 228 | 0.24 | 7.65 |
| 1435 | 222 | 0.24 | 7.89 |
| 1436 | 145 | 0.15 | 8.04 |
| 1437 | 301 | 0.32 | 8.36 |
| 1438 | 128 | 0.14 | 8.50 |
| 1439 | 239 | 0.25 | 8.75 |
| 1440 | 268 | 0.28 | 9.03 |
| 1441 | 177 | 0.19 | 9.22 |
| 1442 | 238 | 0.25 | 9.47 |
| 1443 | 281 | 0.30 | 9.77 |
| 1444 | 251 | 0.27 | 10.04 |
| 1445 | 311 | 0.33 | 10.37 |
| 1446 | 260 | 0.28 | 10.64 |
| 1447 | 244 | 0.26 | 10.90 |
| 1448 | 389 | 0.41 | 11.32 |
| 1449 | 247 | 0.26 | 11.58 |
| 1450 | 263 | 0.28 | 11.86 |
| 1451 | 462 | 0.49 | 12.35 |
| 1452 | 306 | 0.32 | 12.67 |
| 1453 | 248 | 0.26 | 12.94 |
| 1454 | 611 | 0.65 | 13.58 |
| 1455 | 98 | 0.10 | 13.69 |
| 1456 | 793 | 0.84 | 14.53 |
| 1457 | 151 | 0.16 | 14.69 |
| 1458 | 132 | 0.14 | 14.83 |
| 1459 | 798 | 0.85 | 15.68 |
| 1460 | 130 | 0.14 | 15.81 |
| 1461 | 617 | 0.65 | 16.47 |
| 1462 | 359 | 0.38 | 16.85 |
| 1463 | 524 | 0.56 | 17.41 |
| 1464 | 552 | 0.59 | 17.99 |
| 1465 | 391 | 0.41 | 18.41 |
| 1466 | 468 | 0.50 | 18.90 |
| 1467 | 448 | 0.48 | 19.38 |
| 1468 | 664 | 0.70 | 20.08 |
| 1469 | 429 | 0.46 | 20.54 |
| 1470 | 685 | 0.73 | 21.27 |
| 1471 | 534 | 0.57 | 21.83 |
| 1472 | 480 | 0.51 | 22.34 |
| 1473 | 680 | 0.72 | 23.06 |
| 1474 | 498 | 0.53 | 23.59 |
| 1475 | 553 | 0.59 | 24.18 |
| 1476 | 635 | 0.67 | 24.85 |
| 1477 | 670 | 0.71 | 25.56 |
| 1478 | 696 | 0.74 | 26.30 |
| 1479 | 574 | 0.61 | 26.91 |
| 1480 | 705 | 0.75 | 27.66 |
| 1481 | 647 | 0.69 | 28.34 |
| 1482 | 625 | 0.66 | 29.01 |
| 1483 | 581 | 0.62 | 29.62 |
| 1484 | 853 | 0.91 | 30.53 |
| 1485 | 824 | 0.87 | 31.40 |
| 1486 | 541 | 0.57 | 31.98 |
| 1487 | 929 | 0.99 | 32.96 |
| 1488 | 709 | 0.75 | 33.72 |
| 1489 | 763 | 0.81 | 34.53 |
| 1490 | 405 | 0.43 | 34.96 |
| 1491 | 808 | 0.86 | 35.81 |
| 1492 | 915 | 0.97 | 36.78 |
| 1493 | 882 | 0.94 | 37.72 |
| 1494 | 596 | 0.63 | 38.35 |
| 1495 | 860 | 0.91 | 39.27 |
| 1496 | 1,095 | 1.16 | 40.43 |
| 1497 | 35 | 0.04 | 40.46 |
| 1498 | 1,354 | 1.44 | 41.90 |
| 1499 | 597 | 0.63 | 42.53 |
| 1500 | 955 | 1.01 | 43.55 |
| 1501 | 886 | 0.94 | 44.49 |
| 1502 | 507 | 0.54 | 45.03 |
| 1503 | 1,180 | 1.25 | 46.28 |
| 1504 | 350 | 0.37 | 46.65 |
| 1505 | 1,091 | 1.16 | 47.81 |
| 1506 | 702 | 0.74 | 48.55 |
| 1507 | 1,124 | 1.19 | 49.74 |
| 1508 | 758 | 0.80 | 50.55 |
| 1509 | 392 | 0.42 | 50.97 |
| 1510 | 1,330 | 1.41 | 52.38 |
| 1511 | 354 | 0.38 | 52.75 |
| 1512 | 1,114 | 1.18 | 53.93 |
| 1513 | 804 | 0.85 | 54.79 |
| 1514 | 1,005 | 1.07 | 55.85 |
| 1515 | 588 | 0.62 | 56.48 |
| 1516 | 818 | 0.87 | 57.35 |
| 1517 | 947 | 1.00 | 58.35 |
| 1518 | 379 | 0.40 | 58.75 |
| 1519 | 468 | 0.50 | 59.25 |
| 1520 | 1,429 | 1.52 | 60.77 |
| 1521 | 837 | 0.89 | 61.65 |
| 1522 | 734 | 0.78 | 62.43 |
| 1523 | 607 | 0.64 | 63.08 |
| 1524 | 1,221 | 1.30 | 64.37 |
| 1525 | 510 | 0.54 | 64.91 |
| 1526 | 220 | 0.23 | 65.15 |
| 1527 | 1,540 | 1.63 | 66.78 |
| 1528 | 638 | 0.68 | 67.46 |
| 1529 | 122 | 0.13 | 67.59 |
| 1530 | 1,049 | 1.11 | 68.70 |
| 1531 | 576 | 0.61 | 69.31 |
| 1532 | 946 | 1.00 | 70.32 |
| 1533 | 754 | 0.80 | 71.12 |
| 1534 | 191 | 0.20 | 71.32 |
| 1535 | 1,221 | 1.30 | 72.61 |
| 1536 | 970 | 1.03 | 73.64 |
| 1537 | 47 | 0.05 | 73.69 |
| 1538 | 994 | 1.05 | 74.75 |
| 1539 | 568 | 0.60 | 75.35 |
| 1540 | 584 | 0.62 | 75.97 |
| 1541 | 755 | 0.80 | 76.77 |
| 1542 | 451 | 0.48 | 77.25 |
| 1543 | 14 | 0.01 | 77.27 |
| 1544 | 1,569 | 1.66 | 78.93 |
| 1545 | 550 | 0.58 | 79.51 |
| 1546 | 345 | 0.37 | 79.88 |
| 1547 | 65 | 0.07 | 79.95 |
| 1548 | 1,066 | 1.13 | 81.08 |
| 1549 | 902 | 0.96 | 82.04 |
| 1550 | 17 | 0.02 | 82.06 |
| 1551 | 599 | 0.64 | 82.69 |
| 1552 | 390 | 0.41 | 83.10 |
| 1553 | 423 | 0.45 | 83.55 |
| 1554 | 576 | 0.61 | 84.16 |
| 1555 | 466 | 0.49 | 84.66 |
| 1556 | 593 | 0.63 | 85.29 |
| 1557 | 38 | 0.04 | 85.33 |
| 1558 | 513 | 0.54 | 85.87 |
| 1559 | 791 | 0.84 | 86.71 |
| 1560 | 434 | 0.46 | 87.17 |
| 1561 | 97 | 0.10 | 87.28 |
| 1562 | 267 | 0.28 | 87.56 |
| 1563 | 760 | 0.81 | 88.37 |
| 1564 | 541 | 0.57 | 88.94 |
| 1566 | 458 | 0.49 | 89.43 |
| 1567 | 4 | 0.00 | 89.43 |
| 1568 | 507 | 0.54 | 89.97 |
| 1569 | 809 | 0.86 | 90.83 |
| 1570 | 99 | 0.11 | 90.93 |
| 1571 | 84 | 0.09 | 91.02 |
| 1572 | 348 | 0.37 | 91.39 |
| 1573 | 377 | 0.40 | 91.79 |
| 1574 | 100 | 0.11 | 91.90 |
| 1575 | 194 | 0.21 | 92.10 |
| 1576 | 143 | 0.15 | 92.25 |
| 1577 | 525 | 0.56 | 92.81 |
| 1578 | 346 | 0.37 | 93.18 |
| 1580 | 173 | 0.18 | 93.36 |
| 1582 | 478 | 0.51 | 93.87 |
| 1583 | 531 | 0.56 | 94.43 |
| 1585 | 6 | 0.01 | 94.44 |
| 1587 | 544 | 0.58 | 95.02 |
| 1589 | 97 | 0.10 | 95.12 |
| 1590 | 167 | 0.18 | 95.30 |
| 1591 | 244 | 0.26 | 95.55 |
| 1592 | 39 | 0.04 | 95.60 |
| 1593 | 228 | 0.24 | 95.84 |
| 1594 | 13 | 0.01 | 95.85 |
| 1595 | 237 | 0.25 | 96.10 |
| 1596 | 15 | 0.02 | 96.12 |
| 1597 | 104 | 0.11 | 96.23 |
| 1598 | 50 | 0.05 | 96.28 |
| 1599 | 18 | 0.02 | 96.30 |
| 1600 | 435 | 0.46 | 96.76 |
| 1601 | 24 | 0.03 | 96.79 |
| 1603 | 23 | 0.02 | 96.81 |
| 1604 | 1 | 0.00 | 96.81 |
| 1605 | 249 | 0.26 | 97.08 |
| 1606 | 90 | 0.10 | 97.17 |
| 1607 | 106 | 0.11 | 97.29 |
| 1608 | 2 | 0.00 | 97.29 |
| 1609 | 45 | 0.05 | 97.34 |
| 1611 | 252 | 0.27 | 97.60 |
| 1612 | 1 | 0.00 | 97.61 |
| 1614 | 73 | 0.08 | 97.68 |
| 1616 | 78 | 0.08 | 97.77 |
| 1617 | 213 | 0.23 | 97.99 |
| 1619 | 19 | 0.02 | 98.01 |
| 1621 | 79 | 0.08 | 98.10 |
| 1624 | 213 | 0.23 | 98.32 |
| 1626 | 8 | 0.01 | 98.33 |
| 1627 | 2 | 0.00 | 98.33 |
| 1628 | 121 | 0.13 | 98.46 |
| 1629 | 38 | 0.04 | 98.50 |
| 1632 | 15 | 0.02 | 98.52 |
| 1633 | 117 | 0.12 | 98.64 |
| 1634 | 49 | 0.05 | 98.69 |
| 1636 | 2 | 0.00 | 98.69 |
| 1637 | 127 | 0.13 | 98.83 |
| 1639 | 1 | 0.00 | 98.83 |
| 1640 | 9 | 0.01 | 98.84 |
| 1641 | 3 | 0.00 | 98.84 |
| 1642 | 141 | 0.15 | 98.99 |
| 1643 | 2 | 0.00 | 99.00 |
| 1646 | 2 | 0.00 | 99.00 |
| 1647 | 25 | 0.03 | 99.02 |
| 1648 | 123 | 0.13 | 99.15 |
| 1650 | 17 | 0.02 | 99.17 |
| 1653 | 6 | 0.01 | 99.18 |
| 1655 | 108 | 0.11 | 99.29 |
| 1658 | 6 | 0.01 | 99.30 |
| 1661 | 13 | 0.01 | 99.31 |
| 1662 | 87 | 0.09 | 99.41 |
| 1664 | 16 | 0.02 | 99.42 |
| 1666 | 2 | 0.00 | 99.42 |
| 1667 | 23 | 0.02 | 99.45 |
| 1668 | 11 | 0.01 | 99.46 |
| 1670 | 30 | 0.03 | 99.49 |
| 1671 | 43 | 0.05 | 99.54 |
| 1674 | 42 | 0.04 | 99.58 |
| 1677 | 1 | 0.00 | 99.58 |
| 1678 | 38 | 0.04 | 99.62 |
| 1682 | 55 | 0.06 | 99.68 |
| 1684 | 23 | 0.02 | 99.71 |
| 1685 | 2 | 0.00 | 99.71 |
| 1686 | 1 | 0.00 | 99.71 |
| 1687 | 33 | 0.04 | 99.75 |
| 1692 | 47 | 0.05 | 99.80 |
| 1695 | 5 | 0.01 | 99.80 |
| 1698 | 46 | 0.05 | 99.85 |
| 1704 | 30 | 0.03 | 99.88 |
| 1705 | 20 | 0.02 | 99.90 |
| 1711 | 32 | 0.03 | 99.94 |
| 1713 | 4 | 0.00 | 99.94 |
| 1721 | 27 | 0.03 | 99.97 |
| 1734 | 13 | 0.01 | 99.98 |
| 1750 | 3 | 0.00 | 99.99 |
| 1751 | 1 | 0.00 | 99.99 |
| 1755 | 10 | 0.01 | 100.00 |
| 1800 | 2 | 0.00 | 100.00 |

Table 7.C.32 Scale Score Frequency Distribution—Overall Score, Grade Five

|  |  |  |  |
| --- | --- | --- | --- |
| **Scale Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 1150 | 2 | 0.00 | 0.00 |
| 1214 | 1 | 0.00 | 0.00 |
| 1238 | 1 | 0.00 | 0.00 |
| 1243 | 2 | 0.00 | 0.01 |
| 1267 | 1 | 0.00 | 0.01 |
| 1278 | 3 | 0.00 | 0.01 |
| 1285 | 1 | 0.00 | 0.01 |
| 1307 | 1 | 0.00 | 0.01 |
| 1314 | 1 | 0.00 | 0.01 |
| 1315 | 2 | 0.00 | 0.02 |
| 1316 | 1 | 0.00 | 0.02 |
| 1318 | 1 | 0.00 | 0.02 |
| 1320 | 2 | 0.00 | 0.02 |
| 1322 | 1 | 0.00 | 0.02 |
| 1324 | 2 | 0.00 | 0.02 |
| 1327 | 1 | 0.00 | 0.03 |
| 1330 | 1 | 0.00 | 0.03 |
| 1331 | 3 | 0.00 | 0.03 |
| 1335 | 1 | 0.00 | 0.03 |
| 1336 | 5 | 0.01 | 0.04 |
| 1338 | 6 | 0.01 | 0.04 |
| 1340 | 7 | 0.01 | 0.05 |
| 1341 | 3 | 0.00 | 0.05 |
| 1342 | 6 | 0.01 | 0.06 |
| 1344 | 7 | 0.01 | 0.07 |
| 1346 | 6 | 0.01 | 0.08 |
| 1347 | 8 | 0.01 | 0.09 |
| 1348 | 5 | 0.01 | 0.09 |
| 1349 | 10 | 0.01 | 0.10 |
| 1352 | 8 | 0.01 | 0.11 |
| 1353 | 11 | 0.01 | 0.12 |
| 1354 | 24 | 0.03 | 0.15 |
| 1356 | 16 | 0.02 | 0.17 |
| 1357 | 1 | 0.00 | 0.17 |
| 1358 | 4 | 0.00 | 0.17 |
| 1359 | 8 | 0.01 | 0.18 |
| 1360 | 47 | 0.05 | 0.23 |
| 1361 | 4 | 0.00 | 0.24 |
| 1363 | 32 | 0.04 | 0.28 |
| 1364 | 28 | 0.03 | 0.31 |
| 1365 | 22 | 0.02 | 0.33 |
| 1366 | 52 | 0.06 | 0.39 |
| 1367 | 36 | 0.04 | 0.43 |
| 1369 | 36 | 0.04 | 0.47 |
| 1370 | 36 | 0.04 | 0.51 |
| 1371 | 74 | 0.08 | 0.59 |
| 1372 | 12 | 0.01 | 0.61 |
| 1373 | 55 | 0.06 | 0.67 |
| 1374 | 41 | 0.05 | 0.71 |
| 1375 | 94 | 0.11 | 0.82 |
| 1376 | 27 | 0.03 | 0.85 |
| 1377 | 56 | 0.06 | 0.91 |
| 1378 | 54 | 0.06 | 0.97 |
| 1379 | 95 | 0.11 | 1.08 |
| 1380 | 50 | 0.06 | 1.13 |
| 1381 | 5 | 0.01 | 1.14 |
| 1382 | 190 | 0.21 | 1.35 |
| 1383 | 40 | 0.04 | 1.40 |
| 1384 | 7 | 0.01 | 1.41 |
| 1385 | 104 | 0.12 | 1.52 |
| 1386 | 137 | 0.15 | 1.67 |
| 1387 | 54 | 0.06 | 1.74 |
| 1388 | 35 | 0.04 | 1.77 |
| 1389 | 87 | 0.10 | 1.87 |
| 1390 | 141 | 0.16 | 2.03 |
| 1391 | 54 | 0.06 | 2.09 |
| 1392 | 20 | 0.02 | 2.11 |
| 1393 | 174 | 0.19 | 2.31 |
| 1394 | 54 | 0.06 | 2.37 |
| 1395 | 105 | 0.12 | 2.49 |
| 1396 | 87 | 0.10 | 2.58 |
| 1397 | 46 | 0.05 | 2.63 |
| 1398 | 79 | 0.09 | 2.72 |
| 1399 | 133 | 0.15 | 2.87 |
| 1400 | 25 | 0.03 | 2.90 |
| 1401 | 78 | 0.09 | 2.99 |
| 1402 | 137 | 0.15 | 3.14 |
| 1403 | 50 | 0.06 | 3.20 |
| 1404 | 96 | 0.11 | 3.30 |
| 1405 | 50 | 0.06 | 3.36 |
| 1406 | 71 | 0.08 | 3.44 |
| 1407 | 121 | 0.14 | 3.57 |
| 1408 | 56 | 0.06 | 3.64 |
| 1409 | 68 | 0.08 | 3.71 |
| 1410 | 125 | 0.14 | 3.85 |
| 1411 | 52 | 0.06 | 3.91 |
| 1412 | 125 | 0.14 | 4.05 |
| 1413 | 39 | 0.04 | 4.09 |
| 1414 | 91 | 0.10 | 4.20 |
| 1415 | 102 | 0.11 | 4.31 |
| 1416 | 62 | 0.07 | 4.38 |
| 1417 | 144 | 0.16 | 4.54 |
| 1418 | 17 | 0.02 | 4.56 |
| 1419 | 109 | 0.12 | 4.68 |
| 1420 | 35 | 0.04 | 4.72 |
| 1421 | 105 | 0.12 | 4.84 |
| 1422 | 66 | 0.07 | 4.91 |
| 1423 | 87 | 0.10 | 5.01 |
| 1424 | 100 | 0.11 | 5.12 |
| 1425 | 79 | 0.09 | 5.21 |
| 1426 | 118 | 0.13 | 5.34 |
| 1427 | 68 | 0.08 | 5.42 |
| 1428 | 114 | 0.13 | 5.55 |
| 1429 | 75 | 0.08 | 5.63 |
| 1430 | 88 | 0.10 | 5.73 |
| 1431 | 122 | 0.14 | 5.86 |
| 1432 | 114 | 0.13 | 5.99 |
| 1433 | 106 | 0.12 | 6.11 |
| 1434 | 122 | 0.14 | 6.25 |
| 1435 | 134 | 0.15 | 6.40 |
| 1436 | 75 | 0.08 | 6.48 |
| 1437 | 161 | 0.18 | 6.66 |
| 1438 | 78 | 0.09 | 6.75 |
| 1439 | 145 | 0.16 | 6.91 |
| 1440 | 158 | 0.18 | 7.09 |
| 1441 | 114 | 0.13 | 7.21 |
| 1442 | 147 | 0.16 | 7.38 |
| 1443 | 154 | 0.17 | 7.55 |
| 1444 | 132 | 0.15 | 7.70 |
| 1445 | 187 | 0.21 | 7.91 |
| 1446 | 160 | 0.18 | 8.09 |
| 1447 | 143 | 0.16 | 8.25 |
| 1448 | 209 | 0.23 | 8.48 |
| 1449 | 157 | 0.18 | 8.66 |
| 1450 | 131 | 0.15 | 8.80 |
| 1451 | 219 | 0.25 | 9.05 |
| 1452 | 172 | 0.19 | 9.24 |
| 1453 | 112 | 0.13 | 9.37 |
| 1454 | 308 | 0.34 | 9.71 |
| 1455 | 70 | 0.08 | 9.79 |
| 1456 | 405 | 0.45 | 10.24 |
| 1457 | 89 | 0.10 | 10.34 |
| 1458 | 94 | 0.11 | 10.45 |
| 1459 | 371 | 0.42 | 10.86 |
| 1460 | 72 | 0.08 | 10.94 |
| 1461 | 355 | 0.40 | 11.34 |
| 1462 | 189 | 0.21 | 11.55 |
| 1463 | 298 | 0.33 | 11.88 |
| 1464 | 283 | 0.32 | 12.20 |
| 1465 | 217 | 0.24 | 12.44 |
| 1466 | 310 | 0.35 | 12.79 |
| 1467 | 252 | 0.28 | 13.07 |
| 1468 | 434 | 0.49 | 13.56 |
| 1469 | 207 | 0.23 | 13.79 |
| 1470 | 397 | 0.44 | 14.23 |
| 1471 | 282 | 0.32 | 14.55 |
| 1472 | 290 | 0.32 | 14.87 |
| 1473 | 433 | 0.48 | 15.36 |
| 1474 | 290 | 0.32 | 15.68 |
| 1475 | 316 | 0.35 | 16.04 |
| 1476 | 363 | 0.41 | 16.44 |
| 1477 | 433 | 0.48 | 16.93 |
| 1478 | 396 | 0.44 | 17.37 |
| 1479 | 344 | 0.38 | 17.76 |
| 1480 | 493 | 0.55 | 18.31 |
| 1481 | 398 | 0.45 | 18.75 |
| 1482 | 399 | 0.45 | 19.20 |
| 1483 | 327 | 0.37 | 19.56 |
| 1484 | 579 | 0.65 | 20.21 |
| 1485 | 564 | 0.63 | 20.84 |
| 1486 | 321 | 0.36 | 21.20 |
| 1487 | 604 | 0.68 | 21.88 |
| 1488 | 485 | 0.54 | 22.42 |
| 1489 | 520 | 0.58 | 23.00 |
| 1490 | 283 | 0.32 | 23.32 |
| 1491 | 533 | 0.60 | 23.92 |
| 1492 | 644 | 0.72 | 24.64 |
| 1493 | 632 | 0.71 | 25.34 |
| 1494 | 336 | 0.38 | 25.72 |
| 1495 | 687 | 0.77 | 26.49 |
| 1496 | 692 | 0.77 | 27.26 |
| 1497 | 30 | 0.03 | 27.30 |
| 1498 | 980 | 1.10 | 28.39 |
| 1499 | 409 | 0.46 | 28.85 |
| 1500 | 755 | 0.84 | 29.69 |
| 1501 | 689 | 0.77 | 30.47 |
| 1502 | 379 | 0.42 | 30.89 |
| 1503 | 872 | 0.98 | 31.87 |
| 1504 | 253 | 0.28 | 32.15 |
| 1505 | 794 | 0.89 | 33.04 |
| 1506 | 535 | 0.60 | 33.64 |
| 1507 | 846 | 0.95 | 34.58 |
| 1508 | 654 | 0.73 | 35.31 |
| 1509 | 342 | 0.38 | 35.70 |
| 1510 | 1,059 | 1.18 | 36.88 |
| 1511 | 353 | 0.39 | 37.28 |
| 1512 | 824 | 0.92 | 38.20 |
| 1513 | 681 | 0.76 | 38.96 |
| 1514 | 910 | 1.02 | 39.98 |
| 1515 | 504 | 0.56 | 40.54 |
| 1516 | 787 | 0.88 | 41.42 |
| 1517 | 836 | 0.94 | 42.36 |
| 1518 | 336 | 0.38 | 42.73 |
| 1519 | 364 | 0.41 | 43.14 |
| 1520 | 1,328 | 1.49 | 44.63 |
| 1521 | 784 | 0.88 | 45.50 |
| 1522 | 667 | 0.75 | 46.25 |
| 1523 | 598 | 0.67 | 46.92 |
| 1524 | 1,171 | 1.31 | 48.23 |
| 1525 | 485 | 0.54 | 48.77 |
| 1526 | 168 | 0.19 | 48.96 |
| 1527 | 1,579 | 1.77 | 50.73 |
| 1528 | 661 | 0.74 | 51.47 |
| 1529 | 126 | 0.14 | 51.61 |
| 1530 | 1,073 | 1.20 | 52.81 |
| 1531 | 640 | 0.72 | 53.52 |
| 1532 | 983 | 1.10 | 54.62 |
| 1533 | 813 | 0.91 | 55.53 |
| 1534 | 157 | 0.18 | 55.71 |
| 1535 | 1,364 | 1.53 | 57.24 |
| 1536 | 1,041 | 1.16 | 58.40 |
| 1537 | 54 | 0.06 | 58.46 |
| 1538 | 1,120 | 1.25 | 59.71 |
| 1539 | 707 | 0.79 | 60.51 |
| 1540 | 615 | 0.69 | 61.19 |
| 1541 | 750 | 0.84 | 62.03 |
| 1542 | 567 | 0.63 | 62.67 |
| 1543 | 9 | 0.01 | 62.68 |
| 1544 | 1,942 | 2.17 | 64.85 |
| 1545 | 704 | 0.79 | 65.64 |
| 1546 | 399 | 0.45 | 66.08 |
| 1547 | 69 | 0.08 | 66.16 |
| 1548 | 1,379 | 1.54 | 67.70 |
| 1549 | 1,122 | 1.26 | 68.96 |
| 1550 | 21 | 0.02 | 68.98 |
| 1551 | 816 | 0.91 | 69.90 |
| 1552 | 421 | 0.47 | 70.37 |
| 1553 | 639 | 0.71 | 71.08 |
| 1554 | 779 | 0.87 | 71.95 |
| 1555 | 717 | 0.80 | 72.76 |
| 1556 | 726 | 0.81 | 73.57 |
| 1557 | 70 | 0.08 | 73.65 |
| 1558 | 763 | 0.85 | 74.50 |
| 1559 | 1,044 | 1.17 | 75.67 |
| 1560 | 534 | 0.60 | 76.27 |
| 1561 | 145 | 0.16 | 76.43 |
| 1562 | 293 | 0.33 | 76.76 |
| 1563 | 1,026 | 1.15 | 77.90 |
| 1564 | 844 | 0.94 | 78.85 |
| 1565 | 1 | 0.00 | 78.85 |
| 1566 | 562 | 0.63 | 79.48 |
| 1567 | 10 | 0.01 | 79.49 |
| 1568 | 745 | 0.83 | 80.32 |
| 1569 | 1,279 | 1.43 | 81.75 |
| 1570 | 177 | 0.20 | 81.95 |
| 1571 | 102 | 0.11 | 82.07 |
| 1572 | 588 | 0.66 | 82.72 |
| 1573 | 617 | 0.69 | 83.41 |
| 1574 | 152 | 0.17 | 83.58 |
| 1575 | 398 | 0.45 | 84.03 |
| 1576 | 234 | 0.26 | 84.29 |
| 1577 | 824 | 0.92 | 85.21 |
| 1578 | 568 | 0.64 | 85.85 |
| 1580 | 199 | 0.22 | 86.07 |
| 1582 | 924 | 1.03 | 87.11 |
| 1583 | 863 | 0.97 | 88.07 |
| 1585 | 11 | 0.01 | 88.08 |
| 1587 | 952 | 1.07 | 89.15 |
| 1589 | 191 | 0.21 | 89.36 |
| 1590 | 349 | 0.39 | 89.75 |
| 1591 | 384 | 0.43 | 90.18 |
| 1592 | 97 | 0.11 | 90.29 |
| 1593 | 470 | 0.53 | 90.82 |
| 1594 | 13 | 0.01 | 90.83 |
| 1595 | 393 | 0.44 | 91.27 |
| 1596 | 10 | 0.01 | 91.28 |
| 1597 | 237 | 0.27 | 91.55 |
| 1598 | 128 | 0.14 | 91.69 |
| 1599 | 16 | 0.02 | 91.71 |
| 1600 | 856 | 0.96 | 92.67 |
| 1601 | 18 | 0.02 | 92.69 |
| 1603 | 29 | 0.03 | 92.72 |
| 1604 | 1 | 0.00 | 92.72 |
| 1605 | 482 | 0.54 | 93.26 |
| 1606 | 181 | 0.20 | 93.46 |
| 1607 | 326 | 0.36 | 93.83 |
| 1608 | 4 | 0.00 | 93.83 |
| 1609 | 43 | 0.05 | 93.88 |
| 1610 | 1 | 0.00 | 93.88 |
| 1611 | 537 | 0.60 | 94.48 |
| 1612 | 4 | 0.00 | 94.49 |
| 1614 | 70 | 0.08 | 94.56 |
| 1616 | 186 | 0.21 | 94.77 |
| 1617 | 432 | 0.48 | 95.25 |
| 1619 | 70 | 0.08 | 95.33 |
| 1621 | 142 | 0.16 | 95.49 |
| 1624 | 461 | 0.52 | 96.01 |
| 1626 | 14 | 0.02 | 96.02 |
| 1627 | 1 | 0.00 | 96.02 |
| 1628 | 202 | 0.23 | 96.25 |
| 1629 | 100 | 0.11 | 96.36 |
| 1632 | 20 | 0.02 | 96.38 |
| 1633 | 222 | 0.25 | 96.63 |
| 1634 | 189 | 0.21 | 96.84 |
| 1636 | 2 | 0.00 | 96.85 |
| 1637 | 259 | 0.29 | 97.14 |
| 1640 | 36 | 0.04 | 97.18 |
| 1641 | 2 | 0.00 | 97.18 |
| 1642 | 288 | 0.32 | 97.50 |
| 1643 | 6 | 0.01 | 97.51 |
| 1646 | 5 | 0.01 | 97.51 |
| 1647 | 93 | 0.10 | 97.62 |
| 1648 | 297 | 0.33 | 97.95 |
| 1650 | 44 | 0.05 | 98.00 |
| 1653 | 8 | 0.01 | 98.01 |
| 1655 | 273 | 0.31 | 98.31 |
| 1657 | 1 | 0.00 | 98.31 |
| 1658 | 12 | 0.01 | 98.33 |
| 1661 | 28 | 0.03 | 98.36 |
| 1662 | 180 | 0.20 | 98.56 |
| 1664 | 26 | 0.03 | 98.59 |
| 1666 | 3 | 0.00 | 98.59 |
| 1667 | 23 | 0.03 | 98.62 |
| 1668 | 35 | 0.04 | 98.66 |
| 1670 | 31 | 0.03 | 98.69 |
| 1671 | 153 | 0.17 | 98.86 |
| 1674 | 40 | 0.04 | 98.91 |
| 1677 | 3 | 0.00 | 98.91 |
| 1678 | 62 | 0.07 | 98.98 |
| 1682 | 76 | 0.09 | 99.07 |
| 1684 | 95 | 0.11 | 99.17 |
| 1685 | 8 | 0.01 | 99.18 |
| 1686 | 2 | 0.00 | 99.18 |
| 1687 | 75 | 0.08 | 99.27 |
| 1692 | 107 | 0.12 | 99.39 |
| 1695 | 3 | 0.00 | 99.39 |
| 1696 | 2 | 0.00 | 99.39 |
| 1698 | 119 | 0.13 | 99.53 |
| 1704 | 100 | 0.11 | 99.64 |
| 1705 | 48 | 0.05 | 99.69 |
| 1711 | 92 | 0.10 | 99.80 |
| 1713 | 20 | 0.02 | 99.82 |
| 1721 | 63 | 0.07 | 99.89 |
| 1734 | 40 | 0.04 | 99.93 |
| 1750 | 15 | 0.02 | 99.95 |
| 1751 | 2 | 0.00 | 99.95 |
| 1755 | 27 | 0.03 | 99.98 |
| 1800 | 16 | 0.02 | 100.00 |

Table 7.C.33 Scale Score Frequency Distribution—Overall Score, Grade Six

|  |  |  |  |
| --- | --- | --- | --- |
| **Scale Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 1243 | 1 | 0.00 | 0.00 |
| 1256 | 1 | 0.00 | 0.00 |
| 1264 | 1 | 0.00 | 0.00 |
| 1273 | 1 | 0.00 | 0.01 |
| 1281 | 1 | 0.00 | 0.01 |
| 1292 | 1 | 0.00 | 0.01 |
| 1317 | 3 | 0.00 | 0.01 |
| 1320 | 3 | 0.00 | 0.02 |
| 1324 | 1 | 0.00 | 0.02 |
| 1329 | 3 | 0.00 | 0.02 |
| 1331 | 1 | 0.00 | 0.02 |
| 1332 | 1 | 0.00 | 0.02 |
| 1333 | 1 | 0.00 | 0.03 |
| 1336 | 1 | 0.00 | 0.03 |
| 1337 | 1 | 0.00 | 0.03 |
| 1339 | 3 | 0.00 | 0.03 |
| 1340 | 6 | 0.01 | 0.04 |
| 1343 | 3 | 0.00 | 0.04 |
| 1344 | 3 | 0.00 | 0.05 |
| 1345 | 6 | 0.01 | 0.06 |
| 1347 | 9 | 0.01 | 0.07 |
| 1348 | 7 | 0.01 | 0.08 |
| 1351 | 11 | 0.01 | 0.09 |
| 1352 | 4 | 0.01 | 0.10 |
| 1354 | 19 | 0.03 | 0.12 |
| 1355 | 8 | 0.01 | 0.13 |
| 1356 | 10 | 0.01 | 0.14 |
| 1358 | 4 | 0.01 | 0.15 |
| 1359 | 3 | 0.00 | 0.15 |
| 1360 | 15 | 0.02 | 0.17 |
| 1361 | 20 | 0.03 | 0.20 |
| 1362 | 10 | 0.01 | 0.21 |
| 1363 | 5 | 0.01 | 0.22 |
| 1364 | 16 | 0.02 | 0.24 |
| 1366 | 36 | 0.05 | 0.29 |
| 1367 | 3 | 0.00 | 0.29 |
| 1368 | 60 | 0.08 | 0.37 |
| 1370 | 38 | 0.05 | 0.42 |
| 1371 | 5 | 0.01 | 0.43 |
| 1372 | 2 | 0.00 | 0.43 |
| 1373 | 53 | 0.07 | 0.50 |
| 1374 | 35 | 0.05 | 0.55 |
| 1375 | 32 | 0.04 | 0.59 |
| 1377 | 61 | 0.08 | 0.67 |
| 1378 | 27 | 0.04 | 0.71 |
| 1379 | 5 | 0.01 | 0.71 |
| 1380 | 86 | 0.11 | 0.83 |
| 1381 | 41 | 0.05 | 0.88 |
| 1382 | 13 | 0.02 | 0.90 |
| 1383 | 8 | 0.01 | 0.91 |
| 1384 | 76 | 0.10 | 1.01 |
| 1385 | 91 | 0.12 | 1.13 |
| 1386 | 8 | 0.01 | 1.14 |
| 1387 | 1 | 0.00 | 1.14 |
| 1388 | 96 | 0.13 | 1.27 |
| 1389 | 90 | 0.12 | 1.38 |
| 1391 | 71 | 0.09 | 1.48 |
| 1392 | 20 | 0.03 | 1.50 |
| 1393 | 145 | 0.19 | 1.69 |
| 1394 | 59 | 0.08 | 1.77 |
| 1395 | 10 | 0.01 | 1.79 |
| 1396 | 76 | 0.10 | 1.89 |
| 1397 | 142 | 0.19 | 2.07 |
| 1398 | 16 | 0.02 | 2.09 |
| 1399 | 57 | 0.08 | 2.17 |
| 1400 | 61 | 0.08 | 2.25 |
| 1401 | 143 | 0.19 | 2.44 |
| 1402 | 34 | 0.04 | 2.48 |
| 1403 | 36 | 0.05 | 2.53 |
| 1404 | 74 | 0.10 | 2.63 |
| 1405 | 127 | 0.17 | 2.80 |
| 1406 | 10 | 0.01 | 2.81 |
| 1407 | 74 | 0.10 | 2.91 |
| 1408 | 147 | 0.19 | 3.10 |
| 1409 | 16 | 0.02 | 3.12 |
| 1410 | 56 | 0.07 | 3.19 |
| 1411 | 110 | 0.14 | 3.34 |
| 1412 | 70 | 0.09 | 3.43 |
| 1413 | 40 | 0.05 | 3.48 |
| 1414 | 134 | 0.18 | 3.66 |
| 1415 | 22 | 0.03 | 3.69 |
| 1416 | 78 | 0.10 | 3.79 |
| 1417 | 125 | 0.16 | 3.96 |
| 1418 | 45 | 0.06 | 4.02 |
| 1419 | 72 | 0.09 | 4.11 |
| 1420 | 140 | 0.18 | 4.30 |
| 1421 | 36 | 0.05 | 4.34 |
| 1422 | 58 | 0.08 | 4.42 |
| 1423 | 124 | 0.16 | 4.58 |
| 1424 | 40 | 0.05 | 4.64 |
| 1425 | 132 | 0.17 | 4.81 |
| 1426 | 76 | 0.10 | 4.91 |
| 1427 | 95 | 0.13 | 5.04 |
| 1428 | 95 | 0.13 | 5.16 |
| 1429 | 104 | 0.14 | 5.30 |
| 1430 | 49 | 0.06 | 5.36 |
| 1431 | 117 | 0.15 | 5.52 |
| 1432 | 57 | 0.08 | 5.59 |
| 1433 | 139 | 0.18 | 5.78 |
| 1434 | 79 | 0.10 | 5.88 |
| 1435 | 104 | 0.14 | 6.02 |
| 1436 | 138 | 0.18 | 6.20 |
| 1437 | 93 | 0.12 | 6.32 |
| 1438 | 108 | 0.14 | 6.46 |
| 1439 | 103 | 0.14 | 6.60 |
| 1440 | 88 | 0.12 | 6.71 |
| 1441 | 131 | 0.17 | 6.89 |
| 1442 | 122 | 0.16 | 7.05 |
| 1443 | 125 | 0.16 | 7.21 |
| 1444 | 129 | 0.17 | 7.38 |
| 1445 | 135 | 0.18 | 7.56 |
| 1446 | 152 | 0.20 | 7.76 |
| 1447 | 90 | 0.12 | 7.88 |
| 1448 | 176 | 0.23 | 8.11 |
| 1449 | 108 | 0.14 | 8.25 |
| 1450 | 171 | 0.23 | 8.48 |
| 1451 | 201 | 0.26 | 8.74 |
| 1452 | 182 | 0.24 | 8.98 |
| 1453 | 83 | 0.11 | 9.09 |
| 1454 | 202 | 0.27 | 9.36 |
| 1455 | 225 | 0.30 | 9.66 |
| 1456 | 116 | 0.15 | 9.81 |
| 1457 | 194 | 0.26 | 10.06 |
| 1458 | 242 | 0.32 | 10.38 |
| 1459 | 161 | 0.21 | 10.60 |
| 1460 | 244 | 0.32 | 10.92 |
| 1461 | 215 | 0.28 | 11.20 |
| 1462 | 184 | 0.24 | 11.44 |
| 1463 | 214 | 0.28 | 11.73 |
| 1464 | 223 | 0.29 | 12.02 |
| 1465 | 300 | 0.40 | 12.41 |
| 1466 | 221 | 0.29 | 12.71 |
| 1467 | 241 | 0.32 | 13.02 |
| 1468 | 191 | 0.25 | 13.28 |
| 1469 | 362 | 0.48 | 13.75 |
| 1470 | 160 | 0.21 | 13.96 |
| 1471 | 266 | 0.35 | 14.31 |
| 1472 | 425 | 0.56 | 14.87 |
| 1473 | 48 | 0.06 | 14.94 |
| 1474 | 689 | 0.91 | 15.85 |
| 1475 | 96 | 0.13 | 15.97 |
| 1476 | 16 | 0.02 | 15.99 |
| 1477 | 734 | 0.97 | 16.96 |
| 1478 | 76 | 0.10 | 17.06 |
| 1479 | 494 | 0.65 | 17.71 |
| 1480 | 343 | 0.45 | 18.16 |
| 1481 | 56 | 0.07 | 18.24 |
| 1482 | 665 | 0.88 | 19.11 |
| 1483 | 241 | 0.32 | 19.43 |
| 1484 | 581 | 0.77 | 20.20 |
| 1485 | 287 | 0.38 | 20.58 |
| 1486 | 164 | 0.22 | 20.79 |
| 1487 | 714 | 0.94 | 21.73 |
| 1488 | 262 | 0.35 | 22.08 |
| 1489 | 586 | 0.77 | 22.85 |
| 1490 | 327 | 0.43 | 23.28 |
| 1491 | 237 | 0.31 | 23.59 |
| 1492 | 608 | 0.80 | 24.39 |
| 1493 | 372 | 0.49 | 24.88 |
| 1494 | 495 | 0.65 | 25.54 |
| 1495 | 476 | 0.63 | 26.16 |
| 1496 | 390 | 0.51 | 26.68 |
| 1497 | 660 | 0.87 | 27.55 |
| 1498 | 439 | 0.58 | 28.13 |
| 1499 | 354 | 0.47 | 28.59 |
| 1500 | 616 | 0.81 | 29.41 |
| 1501 | 485 | 0.64 | 30.04 |
| 1502 | 613 | 0.81 | 30.85 |
| 1503 | 521 | 0.69 | 31.54 |
| 1504 | 254 | 0.33 | 31.87 |
| 1505 | 770 | 1.01 | 32.89 |
| 1506 | 654 | 0.86 | 33.75 |
| 1507 | 431 | 0.57 | 34.32 |
| 1508 | 718 | 0.95 | 35.26 |
| 1509 | 316 | 0.42 | 35.68 |
| 1510 | 578 | 0.76 | 36.44 |
| 1511 | 770 | 1.01 | 37.46 |
| 1512 | 399 | 0.53 | 37.98 |
| 1513 | 579 | 0.76 | 38.75 |
| 1514 | 499 | 0.66 | 39.40 |
| 1515 | 555 | 0.73 | 40.14 |
| 1516 | 770 | 1.01 | 41.15 |
| 1517 | 611 | 0.81 | 41.96 |
| 1518 | 471 | 0.62 | 42.58 |
| 1519 | 654 | 0.86 | 43.44 |
| 1520 | 700 | 0.92 | 44.36 |
| 1521 | 432 | 0.57 | 44.93 |
| 1522 | 587 | 0.77 | 45.70 |
| 1523 | 530 | 0.70 | 46.40 |
| 1524 | 519 | 0.68 | 47.09 |
| 1525 | 926 | 1.22 | 48.31 |
| 1526 | 717 | 0.94 | 49.25 |
| 1527 | 2 | 0.00 | 49.25 |
| 1528 | 1,111 | 1.46 | 50.72 |
| 1529 | 588 | 0.77 | 51.49 |
| 1530 | 778 | 1.03 | 52.52 |
| 1531 | 190 | 0.25 | 52.77 |
| 1532 | 736 | 0.97 | 53.74 |
| 1533 | 870 | 1.15 | 54.89 |
| 1534 | 385 | 0.51 | 55.39 |
| 1535 | 830 | 1.09 | 56.49 |
| 1536 | 655 | 0.86 | 57.35 |
| 1537 | 277 | 0.37 | 57.72 |
| 1538 | 1,080 | 1.42 | 59.14 |
| 1539 | 344 | 0.45 | 59.59 |
| 1540 | 498 | 0.66 | 60.25 |
| 1541 | 753 | 0.99 | 61.24 |
| 1542 | 516 | 0.68 | 61.92 |
| 1543 | 881 | 1.16 | 63.08 |
| 1544 | 470 | 0.62 | 63.70 |
| 1545 | 108 | 0.14 | 63.84 |
| 1546 | 1,333 | 1.76 | 65.60 |
| 1547 | 347 | 0.46 | 66.06 |
| 1548 | 358 | 0.47 | 66.53 |
| 1549 | 714 | 0.94 | 67.47 |
| 1550 | 538 | 0.71 | 68.18 |
| 1551 | 420 | 0.55 | 68.73 |
| 1552 | 575 | 0.76 | 69.49 |
| 1553 | 526 | 0.69 | 70.18 |
| 1554 | 886 | 1.17 | 71.35 |
| 1555 | 284 | 0.37 | 71.73 |
| 1556 | 168 | 0.22 | 71.95 |
| 1557 | 1,120 | 1.48 | 73.42 |
| 1558 | 59 | 0.08 | 73.50 |
| 1559 | 561 | 0.74 | 74.24 |
| 1560 | 610 | 0.80 | 75.04 |
| 1561 | 589 | 0.78 | 75.82 |
| 1562 | 451 | 0.59 | 76.41 |
| 1563 | 394 | 0.52 | 76.93 |
| 1564 | 610 | 0.80 | 77.74 |
| 1565 | 161 | 0.21 | 77.95 |
| 1566 | 658 | 0.87 | 78.82 |
| 1567 | 709 | 0.93 | 79.75 |
| 1568 | 67 | 0.09 | 79.84 |
| 1569 | 1 | 0.00 | 79.84 |
| 1570 | 1,056 | 1.39 | 81.23 |
| 1571 | 388 | 0.51 | 81.74 |
| 1572 | 42 | 0.06 | 81.80 |
| 1573 | 862 | 1.14 | 82.94 |
| 1575 | 653 | 0.86 | 83.80 |
| 1576 | 108 | 0.14 | 83.94 |
| 1577 | 565 | 0.74 | 84.68 |
| 1578 | 16 | 0.02 | 84.70 |
| 1579 | 352 | 0.46 | 85.17 |
| 1580 | 646 | 0.85 | 86.02 |
| 1581 | 358 | 0.47 | 86.49 |
| 1582 | 262 | 0.35 | 86.84 |
| 1583 | 24 | 0.03 | 86.87 |
| 1584 | 410 | 0.54 | 87.41 |
| 1585 | 461 | 0.61 | 88.02 |
| 1586 | 239 | 0.31 | 88.33 |
| 1587 | 168 | 0.22 | 88.55 |
| 1588 | 259 | 0.34 | 88.89 |
| 1589 | 309 | 0.41 | 89.30 |
| 1590 | 309 | 0.41 | 89.71 |
| 1591 | 177 | 0.23 | 89.94 |
| 1592 | 37 | 0.05 | 89.99 |
| 1593 | 747 | 0.98 | 90.97 |
| 1594 | 12 | 0.02 | 90.99 |
| 1595 | 4 | 0.01 | 91.00 |
| 1596 | 155 | 0.20 | 91.20 |
| 1597 | 516 | 0.68 | 91.88 |
| 1598 | 168 | 0.22 | 92.10 |
| 1599 | 85 | 0.11 | 92.21 |
| 1600 | 227 | 0.30 | 92.51 |
| 1601 | 221 | 0.29 | 92.80 |
| 1602 | 76 | 0.10 | 92.90 |
| 1603 | 214 | 0.28 | 93.19 |
| 1604 | 350 | 0.46 | 93.65 |
| 1606 | 197 | 0.26 | 93.91 |
| 1608 | 349 | 0.46 | 94.37 |
| 1609 | 1 | 0.00 | 94.37 |
| 1610 | 121 | 0.16 | 94.53 |
| 1611 | 112 | 0.15 | 94.68 |
| 1612 | 134 | 0.18 | 94.85 |
| 1613 | 224 | 0.30 | 95.15 |
| 1614 | 155 | 0.20 | 95.35 |
| 1616 | 3 | 0.00 | 95.36 |
| 1617 | 38 | 0.05 | 95.41 |
| 1618 | 455 | 0.60 | 96.01 |
| 1619 | 13 | 0.02 | 96.02 |
| 1621 | 6 | 0.01 | 96.03 |
| 1622 | 181 | 0.24 | 96.27 |
| 1623 | 143 | 0.19 | 96.46 |
| 1626 | 242 | 0.32 | 96.78 |
| 1627 | 9 | 0.01 | 96.79 |
| 1628 | 18 | 0.02 | 96.81 |
| 1630 | 276 | 0.36 | 97.18 |
| 1631 | 21 | 0.03 | 97.20 |
| 1633 | 5 | 0.01 | 97.21 |
| 1634 | 27 | 0.04 | 97.25 |
| 1635 | 189 | 0.25 | 97.49 |
| 1637 | 101 | 0.13 | 97.63 |
| 1639 | 55 | 0.07 | 97.70 |
| 1640 | 7 | 0.01 | 97.71 |
| 1641 | 120 | 0.16 | 97.87 |
| 1643 | 39 | 0.05 | 97.92 |
| 1646 | 91 | 0.12 | 98.04 |
| 1647 | 82 | 0.11 | 98.15 |
| 1649 | 80 | 0.11 | 98.25 |
| 1653 | 87 | 0.11 | 98.37 |
| 1655 | 69 | 0.09 | 98.46 |
| 1657 | 95 | 0.13 | 98.58 |
| 1660 | 16 | 0.02 | 98.60 |
| 1661 | 108 | 0.14 | 98.75 |
| 1664 | 41 | 0.05 | 98.80 |
| 1665 | 105 | 0.14 | 98.94 |
| 1666 | 3 | 0.00 | 98.94 |
| 1669 | 1 | 0.00 | 98.94 |
| 1670 | 103 | 0.14 | 99.08 |
| 1674 | 5 | 0.01 | 99.09 |
| 1676 | 77 | 0.10 | 99.19 |
| 1678 | 15 | 0.02 | 99.21 |
| 1681 | 1 | 0.00 | 99.21 |
| 1682 | 65 | 0.09 | 99.29 |
| 1686 | 8 | 0.01 | 99.31 |
| 1687 | 2 | 0.00 | 99.31 |
| 1689 | 3 | 0.00 | 99.31 |
| 1690 | 41 | 0.05 | 99.37 |
| 1694 | 1 | 0.00 | 99.37 |
| 1697 | 3 | 0.00 | 99.37 |
| 1699 | 29 | 0.04 | 99.41 |
| 1702 | 3 | 0.00 | 99.41 |
| 1703 | 1 | 0.00 | 99.41 |
| 1704 | 1 | 0.00 | 99.42 |
| 1707 | 1 | 0.00 | 99.42 |
| 1709 | 5 | 0.01 | 99.42 |
| 1712 | 5 | 0.01 | 99.43 |
| 1713 | 22 | 0.03 | 99.46 |
| 1715 | 6 | 0.01 | 99.47 |
| 1717 | 4 | 0.01 | 99.47 |
| 1720 | 8 | 0.01 | 99.48 |
| 1723 | 10 | 0.01 | 99.50 |
| 1726 | 14 | 0.02 | 99.52 |
| 1729 | 10 | 0.01 | 99.53 |
| 1731 | 1 | 0.00 | 99.53 |
| 1733 | 24 | 0.03 | 99.56 |
| 1736 | 21 | 0.03 | 99.59 |
| 1737 | 1 | 0.00 | 99.59 |
| 1738 | 5 | 0.01 | 99.60 |
| 1740 | 36 | 0.05 | 99.64 |
| 1744 | 37 | 0.05 | 99.69 |
| 1749 | 43 | 0.06 | 99.75 |
| 1753 | 1 | 0.00 | 99.75 |
| 1754 | 41 | 0.05 | 99.80 |
| 1759 | 39 | 0.05 | 99.86 |
| 1764 | 1 | 0.00 | 99.86 |
| 1766 | 48 | 0.06 | 99.92 |
| 1773 | 19 | 0.03 | 99.95 |
| 1782 | 26 | 0.03 | 99.98 |
| 1796 | 6 | 0.01 | 99.99 |
| 1817 | 1 | 0.00 | 99.99 |
| 1822 | 7 | 0.01 | 100.00 |
| 1900 | 1 | 0.00 | 100.00 |

Table 7.C.34 Scale Score Frequency Distribution—Overall Score, Grade Seven

|  |  |  |  |
| --- | --- | --- | --- |
| **Scale Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 1150 | 1 | 0.00 | 0.00 |
| 1274 | 1 | 0.00 | 0.00 |
| 1296 | 1 | 0.00 | 0.00 |
| 1300 | 1 | 0.00 | 0.01 |
| 1303 | 1 | 0.00 | 0.01 |
| 1306 | 1 | 0.00 | 0.01 |
| 1314 | 1 | 0.00 | 0.01 |
| 1320 | 2 | 0.00 | 0.01 |
| 1325 | 6 | 0.01 | 0.02 |
| 1329 | 2 | 0.00 | 0.03 |
| 1332 | 2 | 0.00 | 0.03 |
| 1333 | 2 | 0.00 | 0.03 |
| 1336 | 1 | 0.00 | 0.03 |
| 1339 | 4 | 0.01 | 0.04 |
| 1340 | 1 | 0.00 | 0.04 |
| 1342 | 1 | 0.00 | 0.04 |
| 1343 | 4 | 0.01 | 0.05 |
| 1344 | 2 | 0.00 | 0.05 |
| 1345 | 4 | 0.01 | 0.06 |
| 1346 | 1 | 0.00 | 0.06 |
| 1347 | 5 | 0.01 | 0.07 |
| 1348 | 9 | 0.01 | 0.08 |
| 1350 | 3 | 0.00 | 0.08 |
| 1351 | 8 | 0.01 | 0.10 |
| 1352 | 5 | 0.01 | 0.10 |
| 1354 | 4 | 0.01 | 0.11 |
| 1355 | 11 | 0.02 | 0.13 |
| 1356 | 10 | 0.02 | 0.14 |
| 1358 | 1 | 0.00 | 0.14 |
| 1360 | 18 | 0.03 | 0.17 |
| 1361 | 28 | 0.04 | 0.21 |
| 1362 | 9 | 0.01 | 0.23 |
| 1363 | 4 | 0.01 | 0.23 |
| 1364 | 9 | 0.01 | 0.25 |
| 1366 | 27 | 0.04 | 0.29 |
| 1367 | 5 | 0.01 | 0.29 |
| 1368 | 52 | 0.08 | 0.37 |
| 1370 | 42 | 0.06 | 0.44 |
| 1371 | 8 | 0.01 | 0.45 |
| 1373 | 43 | 0.06 | 0.51 |
| 1374 | 39 | 0.06 | 0.57 |
| 1375 | 38 | 0.06 | 0.63 |
| 1377 | 42 | 0.06 | 0.69 |
| 1378 | 22 | 0.03 | 0.73 |
| 1379 | 5 | 0.01 | 0.73 |
| 1380 | 79 | 0.12 | 0.85 |
| 1381 | 35 | 0.05 | 0.91 |
| 1382 | 14 | 0.02 | 0.93 |
| 1383 | 9 | 0.01 | 0.94 |
| 1384 | 102 | 0.15 | 1.09 |
| 1385 | 89 | 0.13 | 1.23 |
| 1386 | 7 | 0.01 | 1.24 |
| 1388 | 99 | 0.15 | 1.39 |
| 1389 | 77 | 0.12 | 1.50 |
| 1390 | 2 | 0.00 | 1.51 |
| 1391 | 76 | 0.11 | 1.62 |
| 1392 | 29 | 0.04 | 1.67 |
| 1393 | 130 | 0.20 | 1.86 |
| 1394 | 54 | 0.08 | 1.94 |
| 1395 | 21 | 0.03 | 1.98 |
| 1396 | 77 | 0.12 | 2.09 |
| 1397 | 153 | 0.23 | 2.32 |
| 1398 | 12 | 0.02 | 2.34 |
| 1399 | 49 | 0.07 | 2.41 |
| 1400 | 55 | 0.08 | 2.50 |
| 1401 | 129 | 0.19 | 2.69 |
| 1402 | 46 | 0.07 | 2.76 |
| 1403 | 36 | 0.05 | 2.82 |
| 1404 | 82 | 0.12 | 2.94 |
| 1405 | 132 | 0.20 | 3.14 |
| 1406 | 17 | 0.03 | 3.16 |
| 1407 | 71 | 0.11 | 3.27 |
| 1408 | 155 | 0.23 | 3.51 |
| 1409 | 23 | 0.03 | 3.54 |
| 1410 | 52 | 0.08 | 3.62 |
| 1411 | 158 | 0.24 | 3.86 |
| 1412 | 71 | 0.11 | 3.96 |
| 1413 | 38 | 0.06 | 4.02 |
| 1414 | 163 | 0.25 | 4.27 |
| 1415 | 17 | 0.03 | 4.29 |
| 1416 | 82 | 0.12 | 4.42 |
| 1417 | 113 | 0.17 | 4.59 |
| 1418 | 52 | 0.08 | 4.67 |
| 1419 | 56 | 0.08 | 4.75 |
| 1420 | 119 | 0.18 | 4.93 |
| 1421 | 20 | 0.03 | 4.96 |
| 1422 | 63 | 0.10 | 5.06 |
| 1423 | 113 | 0.17 | 5.23 |
| 1424 | 30 | 0.05 | 5.27 |
| 1425 | 91 | 0.14 | 5.41 |
| 1426 | 84 | 0.13 | 5.53 |
| 1427 | 63 | 0.10 | 5.63 |
| 1428 | 126 | 0.19 | 5.82 |
| 1429 | 84 | 0.13 | 5.95 |
| 1430 | 38 | 0.06 | 6.00 |
| 1431 | 119 | 0.18 | 6.18 |
| 1432 | 30 | 0.05 | 6.23 |
| 1433 | 129 | 0.19 | 6.42 |
| 1434 | 68 | 0.10 | 6.53 |
| 1435 | 78 | 0.12 | 6.64 |
| 1436 | 109 | 0.16 | 6.81 |
| 1437 | 51 | 0.08 | 6.89 |
| 1438 | 90 | 0.14 | 7.02 |
| 1439 | 114 | 0.17 | 7.19 |
| 1440 | 77 | 0.12 | 7.31 |
| 1441 | 129 | 0.19 | 7.50 |
| 1442 | 96 | 0.14 | 7.65 |
| 1443 | 108 | 0.16 | 7.81 |
| 1444 | 108 | 0.16 | 7.97 |
| 1445 | 92 | 0.14 | 8.11 |
| 1446 | 130 | 0.20 | 8.31 |
| 1447 | 64 | 0.10 | 8.41 |
| 1448 | 125 | 0.19 | 8.60 |
| 1449 | 74 | 0.11 | 8.71 |
| 1450 | 115 | 0.17 | 8.88 |
| 1451 | 126 | 0.19 | 9.07 |
| 1452 | 160 | 0.24 | 9.31 |
| 1453 | 72 | 0.11 | 9.42 |
| 1454 | 131 | 0.20 | 9.62 |
| 1455 | 156 | 0.24 | 9.85 |
| 1456 | 112 | 0.17 | 10.02 |
| 1457 | 140 | 0.21 | 10.23 |
| 1458 | 149 | 0.22 | 10.46 |
| 1459 | 132 | 0.20 | 10.66 |
| 1460 | 149 | 0.22 | 10.88 |
| 1461 | 153 | 0.23 | 11.11 |
| 1462 | 121 | 0.18 | 11.30 |
| 1463 | 127 | 0.19 | 11.49 |
| 1464 | 140 | 0.21 | 11.70 |
| 1465 | 194 | 0.29 | 11.99 |
| 1466 | 140 | 0.21 | 12.20 |
| 1467 | 165 | 0.25 | 12.45 |
| 1468 | 142 | 0.21 | 12.67 |
| 1469 | 247 | 0.37 | 13.04 |
| 1470 | 115 | 0.17 | 13.21 |
| 1471 | 157 | 0.24 | 13.45 |
| 1472 | 253 | 0.38 | 13.83 |
| 1473 | 47 | 0.07 | 13.90 |
| 1474 | 408 | 0.62 | 14.52 |
| 1475 | 71 | 0.11 | 14.62 |
| 1476 | 7 | 0.01 | 14.64 |
| 1477 | 510 | 0.77 | 15.40 |
| 1478 | 74 | 0.11 | 15.52 |
| 1479 | 343 | 0.52 | 16.03 |
| 1480 | 238 | 0.36 | 16.39 |
| 1481 | 40 | 0.06 | 16.45 |
| 1482 | 403 | 0.61 | 17.06 |
| 1483 | 169 | 0.26 | 17.32 |
| 1484 | 388 | 0.59 | 17.90 |
| 1485 | 178 | 0.27 | 18.17 |
| 1486 | 122 | 0.18 | 18.35 |
| 1487 | 464 | 0.70 | 19.06 |
| 1488 | 165 | 0.25 | 19.30 |
| 1489 | 371 | 0.56 | 19.86 |
| 1490 | 231 | 0.35 | 20.21 |
| 1491 | 184 | 0.28 | 20.49 |
| 1492 | 416 | 0.63 | 21.12 |
| 1493 | 251 | 0.38 | 21.50 |
| 1494 | 294 | 0.44 | 21.94 |
| 1495 | 325 | 0.49 | 22.43 |
| 1496 | 276 | 0.42 | 22.85 |
| 1497 | 414 | 0.62 | 23.47 |
| 1498 | 290 | 0.44 | 23.91 |
| 1499 | 238 | 0.36 | 24.27 |
| 1500 | 411 | 0.62 | 24.89 |
| 1501 | 358 | 0.54 | 25.43 |
| 1502 | 400 | 0.60 | 26.03 |
| 1503 | 338 | 0.51 | 26.54 |
| 1504 | 170 | 0.26 | 26.80 |
| 1505 | 560 | 0.85 | 27.64 |
| 1506 | 415 | 0.63 | 28.27 |
| 1507 | 279 | 0.42 | 28.69 |
| 1508 | 485 | 0.73 | 29.42 |
| 1509 | 230 | 0.35 | 29.77 |
| 1510 | 433 | 0.65 | 30.42 |
| 1511 | 576 | 0.87 | 31.29 |
| 1512 | 314 | 0.47 | 31.77 |
| 1513 | 378 | 0.57 | 32.34 |
| 1514 | 359 | 0.54 | 32.88 |
| 1515 | 431 | 0.65 | 33.53 |
| 1516 | 520 | 0.78 | 34.31 |
| 1517 | 424 | 0.64 | 34.95 |
| 1518 | 370 | 0.56 | 35.51 |
| 1519 | 451 | 0.68 | 36.19 |
| 1520 | 537 | 0.81 | 37.00 |
| 1521 | 346 | 0.52 | 37.52 |
| 1522 | 437 | 0.66 | 38.18 |
| 1523 | 411 | 0.62 | 38.80 |
| 1524 | 371 | 0.56 | 39.36 |
| 1525 | 692 | 1.04 | 40.41 |
| 1526 | 495 | 0.75 | 41.16 |
| 1527 | 1 | 0.00 | 41.16 |
| 1528 | 754 | 1.14 | 42.29 |
| 1529 | 471 | 0.71 | 43.01 |
| 1530 | 567 | 0.86 | 43.86 |
| 1531 | 136 | 0.21 | 44.07 |
| 1532 | 534 | 0.81 | 44.87 |
| 1533 | 660 | 1.00 | 45.87 |
| 1534 | 262 | 0.40 | 46.26 |
| 1535 | 607 | 0.92 | 47.18 |
| 1536 | 512 | 0.77 | 47.95 |
| 1537 | 238 | 0.36 | 48.31 |
| 1538 | 880 | 1.33 | 49.64 |
| 1539 | 322 | 0.49 | 50.12 |
| 1540 | 386 | 0.58 | 50.71 |
| 1541 | 574 | 0.87 | 51.57 |
| 1542 | 369 | 0.56 | 52.13 |
| 1543 | 650 | 0.98 | 53.11 |
| 1544 | 356 | 0.54 | 53.65 |
| 1545 | 95 | 0.14 | 53.79 |
| 1546 | 1,057 | 1.59 | 55.39 |
| 1547 | 238 | 0.36 | 55.75 |
| 1548 | 328 | 0.49 | 56.24 |
| 1549 | 625 | 0.94 | 57.18 |
| 1550 | 473 | 0.71 | 57.90 |
| 1551 | 354 | 0.53 | 58.43 |
| 1552 | 454 | 0.69 | 59.12 |
| 1553 | 427 | 0.64 | 59.76 |
| 1554 | 814 | 1.23 | 60.99 |
| 1555 | 238 | 0.36 | 61.35 |
| 1556 | 154 | 0.23 | 61.58 |
| 1557 | 977 | 1.47 | 63.05 |
| 1558 | 57 | 0.09 | 63.14 |
| 1559 | 482 | 0.73 | 63.87 |
| 1560 | 584 | 0.88 | 64.75 |
| 1561 | 537 | 0.81 | 65.56 |
| 1562 | 363 | 0.55 | 66.11 |
| 1563 | 341 | 0.51 | 66.62 |
| 1564 | 576 | 0.87 | 67.49 |
| 1565 | 160 | 0.24 | 67.73 |
| 1566 | 626 | 0.94 | 68.68 |
| 1567 | 715 | 1.08 | 69.76 |
| 1568 | 68 | 0.10 | 69.86 |
| 1569 | 1 | 0.00 | 69.86 |
| 1570 | 1,023 | 1.54 | 71.40 |
| 1571 | 392 | 0.59 | 72.00 |
| 1572 | 29 | 0.04 | 72.04 |
| 1573 | 805 | 1.21 | 73.25 |
| 1575 | 685 | 1.03 | 74.29 |
| 1576 | 125 | 0.19 | 74.48 |
| 1577 | 603 | 0.91 | 75.39 |
| 1578 | 8 | 0.01 | 75.40 |
| 1579 | 343 | 0.52 | 75.92 |
| 1580 | 709 | 1.07 | 76.99 |
| 1581 | 464 | 0.70 | 77.69 |
| 1582 | 292 | 0.44 | 78.13 |
| 1583 | 28 | 0.04 | 78.17 |
| 1584 | 487 | 0.73 | 78.90 |
| 1585 | 550 | 0.83 | 79.73 |
| 1586 | 294 | 0.44 | 80.18 |
| 1587 | 175 | 0.26 | 80.44 |
| 1588 | 364 | 0.55 | 80.99 |
| 1589 | 348 | 0.53 | 81.52 |
| 1590 | 343 | 0.52 | 82.03 |
| 1591 | 251 | 0.38 | 82.41 |
| 1592 | 57 | 0.09 | 82.50 |
| 1593 | 943 | 1.42 | 83.92 |
| 1594 | 29 | 0.04 | 83.96 |
| 1595 | 6 | 0.01 | 83.97 |
| 1596 | 205 | 0.31 | 84.28 |
| 1597 | 658 | 0.99 | 85.28 |
| 1598 | 244 | 0.37 | 85.64 |
| 1599 | 86 | 0.13 | 85.77 |
| 1600 | 322 | 0.49 | 86.26 |
| 1601 | 304 | 0.46 | 86.72 |
| 1602 | 78 | 0.12 | 86.84 |
| 1603 | 320 | 0.48 | 87.32 |
| 1604 | 458 | 0.69 | 88.01 |
| 1606 | 298 | 0.45 | 88.46 |
| 1608 | 496 | 0.75 | 89.21 |
| 1609 | 1 | 0.00 | 89.21 |
| 1610 | 198 | 0.30 | 89.51 |
| 1611 | 168 | 0.25 | 89.76 |
| 1612 | 255 | 0.38 | 90.15 |
| 1613 | 393 | 0.59 | 90.74 |
| 1614 | 197 | 0.30 | 91.04 |
| 1616 | 6 | 0.01 | 91.05 |
| 1617 | 97 | 0.15 | 91.19 |
| 1618 | 680 | 1.03 | 92.22 |
| 1619 | 25 | 0.04 | 92.26 |
| 1621 | 5 | 0.01 | 92.26 |
| 1622 | 252 | 0.38 | 92.64 |
| 1623 | 277 | 0.42 | 93.06 |
| 1626 | 431 | 0.65 | 93.71 |
| 1627 | 6 | 0.01 | 93.72 |
| 1628 | 12 | 0.02 | 93.74 |
| 1630 | 432 | 0.65 | 94.39 |
| 1631 | 18 | 0.03 | 94.42 |
| 1633 | 7 | 0.01 | 94.43 |
| 1634 | 28 | 0.04 | 94.47 |
| 1635 | 308 | 0.46 | 94.94 |
| 1637 | 174 | 0.26 | 95.20 |
| 1639 | 49 | 0.07 | 95.27 |
| 1640 | 26 | 0.04 | 95.31 |
| 1641 | 199 | 0.30 | 95.61 |
| 1643 | 61 | 0.09 | 95.70 |
| 1646 | 157 | 0.24 | 95.94 |
| 1647 | 189 | 0.29 | 96.23 |
| 1648 | 1 | 0.00 | 96.23 |
| 1649 | 126 | 0.19 | 96.42 |
| 1653 | 131 | 0.20 | 96.62 |
| 1655 | 136 | 0.21 | 96.82 |
| 1657 | 156 | 0.24 | 97.06 |
| 1659 | 4 | 0.01 | 97.06 |
| 1660 | 28 | 0.04 | 97.10 |
| 1661 | 167 | 0.25 | 97.36 |
| 1664 | 80 | 0.12 | 97.48 |
| 1665 | 187 | 0.28 | 97.76 |
| 1666 | 4 | 0.01 | 97.77 |
| 1670 | 186 | 0.28 | 98.05 |
| 1674 | 7 | 0.01 | 98.06 |
| 1676 | 160 | 0.24 | 98.30 |
| 1678 | 36 | 0.05 | 98.35 |
| 1681 | 1 | 0.00 | 98.35 |
| 1682 | 141 | 0.21 | 98.57 |
| 1684 | 1 | 0.00 | 98.57 |
| 1686 | 11 | 0.02 | 98.58 |
| 1690 | 115 | 0.17 | 98.76 |
| 1692 | 1 | 0.00 | 98.76 |
| 1697 | 1 | 0.00 | 98.76 |
| 1699 | 64 | 0.10 | 98.86 |
| 1702 | 5 | 0.01 | 98.87 |
| 1703 | 10 | 0.02 | 98.88 |
| 1704 | 2 | 0.00 | 98.88 |
| 1707 | 4 | 0.01 | 98.89 |
| 1709 | 5 | 0.01 | 98.90 |
| 1712 | 5 | 0.01 | 98.90 |
| 1713 | 36 | 0.05 | 98.96 |
| 1715 | 5 | 0.01 | 98.97 |
| 1717 | 7 | 0.01 | 98.98 |
| 1720 | 13 | 0.02 | 99.00 |
| 1723 | 10 | 0.02 | 99.01 |
| 1726 | 22 | 0.03 | 99.04 |
| 1729 | 21 | 0.03 | 99.08 |
| 1733 | 28 | 0.04 | 99.12 |
| 1736 | 46 | 0.07 | 99.19 |
| 1738 | 14 | 0.02 | 99.21 |
| 1740 | 54 | 0.08 | 99.29 |
| 1744 | 51 | 0.08 | 99.37 |
| 1749 | 77 | 0.12 | 99.48 |
| 1754 | 76 | 0.11 | 99.60 |
| 1759 | 77 | 0.12 | 99.71 |
| 1764 | 2 | 0.00 | 99.72 |
| 1766 | 67 | 0.10 | 99.82 |
| 1773 | 48 | 0.07 | 99.89 |
| 1782 | 35 | 0.05 | 99.94 |
| 1796 | 21 | 0.03 | 99.98 |
| 1817 | 3 | 0.00 | 99.98 |
| 1822 | 10 | 0.02 | 100.00 |
| 1900 | 3 | 0.00 | 100.00 |

Table 7.C.35 Scale Score Frequency Distribution—Overall Score, Grade Eight

|  |  |  |  |
| --- | --- | --- | --- |
| **Scale Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 1314 | 2 | 0.00 | 0.00 |
| 1320 | 1 | 0.00 | 0.00 |
| 1324 | 1 | 0.00 | 0.01 |
| 1325 | 2 | 0.00 | 0.01 |
| 1326 | 1 | 0.00 | 0.01 |
| 1329 | 1 | 0.00 | 0.01 |
| 1332 | 3 | 0.00 | 0.02 |
| 1333 | 2 | 0.00 | 0.02 |
| 1336 | 2 | 0.00 | 0.02 |
| 1337 | 2 | 0.00 | 0.03 |
| 1339 | 7 | 0.01 | 0.04 |
| 1340 | 1 | 0.00 | 0.04 |
| 1343 | 2 | 0.00 | 0.04 |
| 1344 | 7 | 0.01 | 0.06 |
| 1345 | 2 | 0.00 | 0.06 |
| 1347 | 3 | 0.00 | 0.06 |
| 1348 | 9 | 0.01 | 0.08 |
| 1350 | 1 | 0.00 | 0.08 |
| 1351 | 9 | 0.01 | 0.10 |
| 1352 | 4 | 0.01 | 0.10 |
| 1354 | 7 | 0.01 | 0.11 |
| 1355 | 10 | 0.02 | 0.13 |
| 1356 | 9 | 0.01 | 0.15 |
| 1358 | 8 | 0.01 | 0.16 |
| 1360 | 15 | 0.02 | 0.18 |
| 1361 | 19 | 0.03 | 0.21 |
| 1362 | 16 | 0.03 | 0.24 |
| 1363 | 2 | 0.00 | 0.24 |
| 1364 | 13 | 0.02 | 0.27 |
| 1366 | 16 | 0.03 | 0.29 |
| 1367 | 5 | 0.01 | 0.30 |
| 1368 | 35 | 0.06 | 0.36 |
| 1370 | 29 | 0.05 | 0.41 |
| 1371 | 10 | 0.02 | 0.42 |
| 1372 | 1 | 0.00 | 0.42 |
| 1373 | 48 | 0.08 | 0.50 |
| 1374 | 41 | 0.07 | 0.57 |
| 1375 | 21 | 0.03 | 0.61 |
| 1377 | 48 | 0.08 | 0.69 |
| 1378 | 15 | 0.02 | 0.71 |
| 1379 | 3 | 0.00 | 0.72 |
| 1380 | 65 | 0.11 | 0.82 |
| 1381 | 34 | 0.06 | 0.88 |
| 1382 | 10 | 0.02 | 0.90 |
| 1383 | 12 | 0.02 | 0.92 |
| 1384 | 59 | 0.10 | 1.01 |
| 1385 | 66 | 0.11 | 1.12 |
| 1386 | 14 | 0.02 | 1.15 |
| 1387 | 1 | 0.00 | 1.15 |
| 1388 | 89 | 0.15 | 1.29 |
| 1389 | 94 | 0.16 | 1.45 |
| 1391 | 61 | 0.10 | 1.55 |
| 1392 | 17 | 0.03 | 1.58 |
| 1393 | 105 | 0.17 | 1.75 |
| 1394 | 62 | 0.10 | 1.85 |
| 1395 | 17 | 0.03 | 1.88 |
| 1396 | 61 | 0.10 | 1.98 |
| 1397 | 132 | 0.22 | 2.20 |
| 1398 | 10 | 0.02 | 2.22 |
| 1399 | 57 | 0.09 | 2.31 |
| 1400 | 52 | 0.09 | 2.40 |
| 1401 | 94 | 0.16 | 2.55 |
| 1402 | 43 | 0.07 | 2.62 |
| 1403 | 39 | 0.06 | 2.69 |
| 1404 | 85 | 0.14 | 2.83 |
| 1405 | 115 | 0.19 | 3.02 |
| 1406 | 15 | 0.02 | 3.04 |
| 1407 | 61 | 0.10 | 3.15 |
| 1408 | 129 | 0.21 | 3.36 |
| 1409 | 15 | 0.02 | 3.38 |
| 1410 | 48 | 0.08 | 3.46 |
| 1411 | 163 | 0.27 | 3.73 |
| 1412 | 40 | 0.07 | 3.80 |
| 1413 | 26 | 0.04 | 3.84 |
| 1414 | 153 | 0.25 | 4.09 |
| 1415 | 29 | 0.05 | 4.14 |
| 1416 | 71 | 0.12 | 4.26 |
| 1417 | 115 | 0.19 | 4.45 |
| 1418 | 48 | 0.08 | 4.53 |
| 1419 | 54 | 0.09 | 4.62 |
| 1420 | 128 | 0.21 | 4.83 |
| 1421 | 20 | 0.03 | 4.86 |
| 1422 | 53 | 0.09 | 4.95 |
| 1423 | 117 | 0.19 | 5.14 |
| 1424 | 43 | 0.07 | 5.22 |
| 1425 | 79 | 0.13 | 5.35 |
| 1426 | 85 | 0.14 | 5.49 |
| 1427 | 49 | 0.08 | 5.57 |
| 1428 | 103 | 0.17 | 5.74 |
| 1429 | 64 | 0.11 | 5.84 |
| 1430 | 42 | 0.07 | 5.91 |
| 1431 | 136 | 0.22 | 6.14 |
| 1432 | 21 | 0.03 | 6.17 |
| 1433 | 98 | 0.16 | 6.33 |
| 1434 | 74 | 0.12 | 6.46 |
| 1435 | 71 | 0.12 | 6.57 |
| 1436 | 102 | 0.17 | 6.74 |
| 1437 | 44 | 0.07 | 6.82 |
| 1438 | 70 | 0.12 | 6.93 |
| 1439 | 98 | 0.16 | 7.09 |
| 1440 | 42 | 0.07 | 7.16 |
| 1441 | 118 | 0.20 | 7.36 |
| 1442 | 66 | 0.11 | 7.47 |
| 1443 | 99 | 0.16 | 7.63 |
| 1444 | 101 | 0.17 | 7.80 |
| 1445 | 83 | 0.14 | 7.93 |
| 1446 | 129 | 0.21 | 8.15 |
| 1447 | 57 | 0.09 | 8.24 |
| 1448 | 112 | 0.19 | 8.43 |
| 1449 | 73 | 0.12 | 8.55 |
| 1450 | 103 | 0.17 | 8.72 |
| 1451 | 116 | 0.19 | 8.91 |
| 1452 | 107 | 0.18 | 9.09 |
| 1453 | 71 | 0.12 | 9.20 |
| 1454 | 99 | 0.16 | 9.37 |
| 1455 | 115 | 0.19 | 9.56 |
| 1456 | 100 | 0.17 | 9.72 |
| 1457 | 98 | 0.16 | 9.88 |
| 1458 | 141 | 0.23 | 10.12 |
| 1459 | 78 | 0.13 | 10.25 |
| 1460 | 119 | 0.20 | 10.44 |
| 1461 | 128 | 0.21 | 10.65 |
| 1462 | 109 | 0.18 | 10.84 |
| 1463 | 101 | 0.17 | 11.00 |
| 1464 | 99 | 0.16 | 11.17 |
| 1465 | 148 | 0.24 | 11.41 |
| 1466 | 109 | 0.18 | 11.59 |
| 1467 | 135 | 0.22 | 11.81 |
| 1468 | 106 | 0.18 | 11.99 |
| 1469 | 190 | 0.31 | 12.30 |
| 1470 | 119 | 0.20 | 12.50 |
| 1471 | 125 | 0.21 | 12.71 |
| 1472 | 191 | 0.32 | 13.02 |
| 1473 | 64 | 0.11 | 13.13 |
| 1474 | 305 | 0.50 | 13.63 |
| 1475 | 86 | 0.14 | 13.77 |
| 1476 | 11 | 0.02 | 13.79 |
| 1477 | 365 | 0.60 | 14.40 |
| 1478 | 50 | 0.08 | 14.48 |
| 1479 | 224 | 0.37 | 14.85 |
| 1480 | 149 | 0.25 | 15.09 |
| 1481 | 25 | 0.04 | 15.14 |
| 1482 | 351 | 0.58 | 15.72 |
| 1483 | 93 | 0.15 | 15.87 |
| 1484 | 241 | 0.40 | 16.27 |
| 1485 | 116 | 0.19 | 16.46 |
| 1486 | 75 | 0.12 | 16.58 |
| 1487 | 327 | 0.54 | 17.12 |
| 1488 | 130 | 0.21 | 17.34 |
| 1489 | 290 | 0.48 | 17.82 |
| 1490 | 171 | 0.28 | 18.10 |
| 1491 | 101 | 0.17 | 18.27 |
| 1492 | 300 | 0.50 | 18.76 |
| 1493 | 180 | 0.30 | 19.06 |
| 1494 | 241 | 0.40 | 19.46 |
| 1495 | 233 | 0.39 | 19.85 |
| 1496 | 181 | 0.30 | 20.14 |
| 1497 | 305 | 0.50 | 20.65 |
| 1498 | 205 | 0.34 | 20.99 |
| 1499 | 166 | 0.27 | 21.26 |
| 1500 | 307 | 0.51 | 21.77 |
| 1501 | 233 | 0.39 | 22.15 |
| 1502 | 286 | 0.47 | 22.63 |
| 1503 | 234 | 0.39 | 23.01 |
| 1504 | 120 | 0.20 | 23.21 |
| 1505 | 363 | 0.60 | 23.81 |
| 1506 | 301 | 0.50 | 24.31 |
| 1507 | 226 | 0.37 | 24.68 |
| 1508 | 355 | 0.59 | 25.27 |
| 1509 | 187 | 0.31 | 25.58 |
| 1510 | 299 | 0.49 | 26.07 |
| 1511 | 447 | 0.74 | 26.81 |
| 1512 | 199 | 0.33 | 27.14 |
| 1513 | 278 | 0.46 | 27.60 |
| 1514 | 266 | 0.44 | 28.04 |
| 1515 | 334 | 0.55 | 28.59 |
| 1516 | 347 | 0.57 | 29.17 |
| 1517 | 315 | 0.52 | 29.69 |
| 1518 | 217 | 0.36 | 30.05 |
| 1519 | 356 | 0.59 | 30.63 |
| 1520 | 350 | 0.58 | 31.21 |
| 1521 | 230 | 0.38 | 31.59 |
| 1522 | 311 | 0.51 | 32.11 |
| 1523 | 292 | 0.48 | 32.59 |
| 1524 | 268 | 0.44 | 33.03 |
| 1525 | 527 | 0.87 | 33.90 |
| 1526 | 387 | 0.64 | 34.54 |
| 1527 | 1 | 0.00 | 34.54 |
| 1528 | 571 | 0.94 | 35.49 |
| 1529 | 338 | 0.56 | 36.05 |
| 1530 | 419 | 0.69 | 36.74 |
| 1531 | 102 | 0.17 | 36.91 |
| 1532 | 418 | 0.69 | 37.60 |
| 1533 | 522 | 0.86 | 38.46 |
| 1534 | 196 | 0.32 | 38.79 |
| 1535 | 455 | 0.75 | 39.54 |
| 1536 | 391 | 0.65 | 40.18 |
| 1537 | 168 | 0.28 | 40.46 |
| 1538 | 623 | 1.03 | 41.49 |
| 1539 | 222 | 0.37 | 41.86 |
| 1540 | 289 | 0.48 | 42.34 |
| 1541 | 511 | 0.84 | 43.18 |
| 1542 | 330 | 0.55 | 43.73 |
| 1543 | 516 | 0.85 | 44.58 |
| 1544 | 315 | 0.52 | 45.10 |
| 1545 | 89 | 0.15 | 45.25 |
| 1546 | 833 | 1.38 | 46.62 |
| 1547 | 209 | 0.35 | 46.97 |
| 1548 | 289 | 0.48 | 47.45 |
| 1549 | 572 | 0.95 | 48.39 |
| 1550 | 425 | 0.70 | 49.10 |
| 1551 | 298 | 0.49 | 49.59 |
| 1552 | 379 | 0.63 | 50.21 |
| 1553 | 408 | 0.67 | 50.89 |
| 1554 | 659 | 1.09 | 51.98 |
| 1555 | 213 | 0.35 | 52.33 |
| 1556 | 131 | 0.22 | 52.55 |
| 1557 | 907 | 1.50 | 54.05 |
| 1558 | 61 | 0.10 | 54.15 |
| 1559 | 441 | 0.73 | 54.88 |
| 1560 | 488 | 0.81 | 55.68 |
| 1561 | 460 | 0.76 | 56.44 |
| 1562 | 346 | 0.57 | 57.02 |
| 1563 | 312 | 0.52 | 57.53 |
| 1564 | 521 | 0.86 | 58.39 |
| 1565 | 175 | 0.29 | 58.68 |
| 1566 | 632 | 1.04 | 59.73 |
| 1567 | 626 | 1.03 | 60.76 |
| 1568 | 61 | 0.10 | 60.86 |
| 1569 | 1 | 0.00 | 60.86 |
| 1570 | 1,047 | 1.73 | 62.59 |
| 1571 | 418 | 0.69 | 63.28 |
| 1572 | 32 | 0.05 | 63.34 |
| 1573 | 794 | 1.31 | 64.65 |
| 1575 | 737 | 1.22 | 65.87 |
| 1576 | 126 | 0.21 | 66.08 |
| 1577 | 651 | 1.08 | 67.15 |
| 1578 | 11 | 0.02 | 67.17 |
| 1579 | 324 | 0.54 | 67.71 |
| 1580 | 738 | 1.22 | 68.93 |
| 1581 | 431 | 0.71 | 69.64 |
| 1582 | 273 | 0.45 | 70.09 |
| 1583 | 50 | 0.08 | 70.17 |
| 1584 | 502 | 0.83 | 71.00 |
| 1585 | 602 | 1.00 | 72.00 |
| 1586 | 325 | 0.54 | 72.53 |
| 1587 | 176 | 0.29 | 72.83 |
| 1588 | 389 | 0.64 | 73.47 |
| 1589 | 359 | 0.59 | 74.06 |
| 1590 | 319 | 0.53 | 74.59 |
| 1591 | 263 | 0.43 | 75.02 |
| 1592 | 72 | 0.12 | 75.14 |
| 1593 | 941 | 1.56 | 76.70 |
| 1594 | 32 | 0.05 | 76.75 |
| 1595 | 10 | 0.02 | 76.77 |
| 1596 | 245 | 0.40 | 77.17 |
| 1597 | 793 | 1.31 | 78.48 |
| 1598 | 305 | 0.50 | 78.99 |
| 1599 | 110 | 0.18 | 79.17 |
| 1600 | 321 | 0.53 | 79.70 |
| 1601 | 406 | 0.67 | 80.37 |
| 1602 | 89 | 0.15 | 80.52 |
| 1603 | 388 | 0.64 | 81.16 |
| 1604 | 500 | 0.83 | 81.99 |
| 1606 | 382 | 0.63 | 82.62 |
| 1608 | 523 | 0.86 | 83.48 |
| 1610 | 258 | 0.43 | 83.91 |
| 1611 | 144 | 0.24 | 84.15 |
| 1612 | 344 | 0.57 | 84.72 |
| 1613 | 402 | 0.66 | 85.38 |
| 1614 | 204 | 0.34 | 85.72 |
| 1616 | 6 | 0.01 | 85.73 |
| 1617 | 119 | 0.20 | 85.92 |
| 1618 | 923 | 1.53 | 87.45 |
| 1619 | 54 | 0.09 | 87.54 |
| 1621 | 6 | 0.01 | 87.55 |
| 1622 | 278 | 0.46 | 88.01 |
| 1623 | 345 | 0.57 | 88.58 |
| 1626 | 581 | 0.96 | 89.54 |
| 1627 | 8 | 0.01 | 89.55 |
| 1628 | 23 | 0.04 | 89.59 |
| 1630 | 595 | 0.98 | 90.57 |
| 1631 | 20 | 0.03 | 90.61 |
| 1633 | 13 | 0.02 | 90.63 |
| 1634 | 35 | 0.06 | 90.69 |
| 1635 | 455 | 0.75 | 91.44 |
| 1637 | 249 | 0.41 | 91.85 |
| 1639 | 56 | 0.09 | 91.94 |
| 1640 | 43 | 0.07 | 92.01 |
| 1641 | 346 | 0.57 | 92.58 |
| 1643 | 70 | 0.12 | 92.70 |
| 1646 | 232 | 0.38 | 93.08 |
| 1647 | 302 | 0.50 | 93.58 |
| 1648 | 4 | 0.01 | 93.59 |
| 1649 | 152 | 0.25 | 93.84 |
| 1653 | 155 | 0.26 | 94.10 |
| 1655 | 202 | 0.33 | 94.43 |
| 1657 | 191 | 0.32 | 94.75 |
| 1659 | 4 | 0.01 | 94.75 |
| 1660 | 59 | 0.10 | 94.85 |
| 1661 | 241 | 0.40 | 95.25 |
| 1664 | 138 | 0.23 | 95.48 |
| 1665 | 257 | 0.42 | 95.90 |
| 1666 | 16 | 0.03 | 95.93 |
| 1670 | 298 | 0.49 | 96.42 |
| 1674 | 10 | 0.02 | 96.44 |
| 1676 | 260 | 0.43 | 96.87 |
| 1678 | 61 | 0.10 | 96.97 |
| 1681 | 1 | 0.00 | 96.97 |
| 1682 | 262 | 0.43 | 97.40 |
| 1686 | 23 | 0.04 | 97.44 |
| 1687 | 1 | 0.00 | 97.44 |
| 1690 | 205 | 0.34 | 97.78 |
| 1692 | 1 | 0.00 | 97.78 |
| 1694 | 1 | 0.00 | 97.79 |
| 1697 | 2 | 0.00 | 97.79 |
| 1699 | 134 | 0.22 | 98.01 |
| 1703 | 28 | 0.05 | 98.06 |
| 1707 | 4 | 0.01 | 98.06 |
| 1709 | 6 | 0.01 | 98.07 |
| 1712 | 1 | 0.00 | 98.07 |
| 1713 | 66 | 0.11 | 98.18 |
| 1715 | 10 | 0.02 | 98.20 |
| 1717 | 8 | 0.01 | 98.21 |
| 1720 | 11 | 0.02 | 98.23 |
| 1723 | 10 | 0.02 | 98.25 |
| 1726 | 12 | 0.02 | 98.27 |
| 1729 | 26 | 0.04 | 98.31 |
| 1731 | 1 | 0.00 | 98.31 |
| 1733 | 34 | 0.06 | 98.37 |
| 1736 | 38 | 0.06 | 98.43 |
| 1737 | 1 | 0.00 | 98.43 |
| 1738 | 24 | 0.04 | 98.47 |
| 1740 | 66 | 0.11 | 98.58 |
| 1744 | 92 | 0.15 | 98.73 |
| 1749 | 98 | 0.16 | 98.90 |
| 1753 | 1 | 0.00 | 98.90 |
| 1754 | 108 | 0.18 | 99.08 |
| 1759 | 134 | 0.22 | 99.30 |
| 1764 | 3 | 0.00 | 99.30 |
| 1766 | 121 | 0.20 | 99.50 |
| 1773 | 129 | 0.21 | 99.72 |
| 1782 | 94 | 0.16 | 99.87 |
| 1796 | 45 | 0.07 | 99.95 |
| 1817 | 8 | 0.01 | 99.96 |
| 1822 | 20 | 0.03 | 99.99 |
| 1900 | 5 | 0.01 | 100.00 |

Table 7.C.36 Scale Score Frequency Distribution—Overall Score, Grade Nine

|  |  |  |  |
| --- | --- | --- | --- |
| **Scale Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 1274 | 2 | 0.00 | 0.00 |
| 1277 | 1 | 0.00 | 0.00 |
| 1284 | 3 | 0.00 | 0.01 |
| 1290 | 2 | 0.00 | 0.01 |
| 1291 | 4 | 0.01 | 0.02 |
| 1297 | 4 | 0.01 | 0.03 |
| 1299 | 2 | 0.00 | 0.03 |
| 1302 | 7 | 0.01 | 0.04 |
| 1306 | 8 | 0.01 | 0.05 |
| 1308 | 1 | 0.00 | 0.06 |
| 1309 | 3 | 0.00 | 0.06 |
| 1310 | 3 | 0.00 | 0.07 |
| 1314 | 5 | 0.01 | 0.07 |
| 1315 | 3 | 0.00 | 0.08 |
| 1316 | 13 | 0.02 | 0.10 |
| 1317 | 1 | 0.00 | 0.10 |
| 1320 | 3 | 0.00 | 0.11 |
| 1322 | 15 | 0.02 | 0.13 |
| 1325 | 2 | 0.00 | 0.14 |
| 1326 | 11 | 0.02 | 0.15 |
| 1327 | 16 | 0.03 | 0.18 |
| 1329 | 13 | 0.02 | 0.20 |
| 1331 | 13 | 0.02 | 0.22 |
| 1333 | 25 | 0.04 | 0.27 |
| 1335 | 16 | 0.03 | 0.29 |
| 1338 | 18 | 0.03 | 0.32 |
| 1339 | 70 | 0.12 | 0.44 |
| 1342 | 12 | 0.02 | 0.46 |
| 1344 | 34 | 0.06 | 0.52 |
| 1345 | 8 | 0.01 | 0.53 |
| 1346 | 50 | 0.08 | 0.61 |
| 1348 | 64 | 0.11 | 0.72 |
| 1351 | 5 | 0.01 | 0.73 |
| 1352 | 101 | 0.17 | 0.89 |
| 1353 | 20 | 0.03 | 0.93 |
| 1355 | 60 | 0.10 | 1.03 |
| 1356 | 73 | 0.12 | 1.15 |
| 1357 | 62 | 0.10 | 1.25 |
| 1358 | 12 | 0.02 | 1.27 |
| 1359 | 21 | 0.03 | 1.31 |
| 1361 | 136 | 0.23 | 1.53 |
| 1362 | 22 | 0.04 | 1.57 |
| 1363 | 97 | 0.16 | 1.73 |
| 1365 | 80 | 0.13 | 1.86 |
| 1366 | 90 | 0.15 | 2.01 |
| 1367 | 5 | 0.01 | 2.02 |
| 1368 | 29 | 0.05 | 2.07 |
| 1369 | 128 | 0.21 | 2.28 |
| 1370 | 62 | 0.10 | 2.39 |
| 1371 | 85 | 0.14 | 2.53 |
| 1372 | 46 | 0.08 | 2.60 |
| 1373 | 15 | 0.02 | 2.63 |
| 1374 | 98 | 0.16 | 2.79 |
| 1375 | 150 | 0.25 | 3.04 |
| 1376 | 72 | 0.12 | 3.16 |
| 1377 | 9 | 0.01 | 3.18 |
| 1378 | 103 | 0.17 | 3.35 |
| 1379 | 112 | 0.19 | 3.53 |
| 1380 | 31 | 0.05 | 3.59 |
| 1381 | 229 | 0.38 | 3.97 |
| 1383 | 119 | 0.20 | 4.16 |
| 1384 | 25 | 0.04 | 4.21 |
| 1385 | 135 | 0.22 | 4.43 |
| 1386 | 220 | 0.37 | 4.80 |
| 1387 | 33 | 0.05 | 4.85 |
| 1388 | 11 | 0.02 | 4.87 |
| 1389 | 178 | 0.30 | 5.17 |
| 1390 | 60 | 0.10 | 5.27 |
| 1391 | 150 | 0.25 | 5.51 |
| 1393 | 177 | 0.29 | 5.81 |
| 1394 | 29 | 0.05 | 5.86 |
| 1395 | 237 | 0.39 | 6.25 |
| 1396 | 98 | 0.16 | 6.41 |
| 1397 | 19 | 0.03 | 6.45 |
| 1398 | 117 | 0.19 | 6.64 |
| 1399 | 142 | 0.24 | 6.88 |
| 1400 | 70 | 0.12 | 6.99 |
| 1401 | 110 | 0.18 | 7.18 |
| 1402 | 66 | 0.11 | 7.29 |
| 1403 | 111 | 0.18 | 7.47 |
| 1404 | 70 | 0.12 | 7.59 |
| 1405 | 137 | 0.23 | 7.81 |
| 1406 | 68 | 0.11 | 7.93 |
| 1407 | 167 | 0.28 | 8.21 |
| 1408 | 16 | 0.03 | 8.23 |
| 1409 | 62 | 0.10 | 8.34 |
| 1410 | 125 | 0.21 | 8.54 |
| 1411 | 86 | 0.14 | 8.69 |
| 1412 | 42 | 0.07 | 8.76 |
| 1413 | 53 | 0.09 | 8.84 |
| 1414 | 162 | 0.27 | 9.11 |
| 1415 | 41 | 0.07 | 9.18 |
| 1416 | 101 | 0.17 | 9.35 |
| 1417 | 146 | 0.24 | 9.59 |
| 1418 | 40 | 0.07 | 9.66 |
| 1419 | 39 | 0.06 | 9.72 |
| 1420 | 126 | 0.21 | 9.93 |
| 1421 | 65 | 0.11 | 10.04 |
| 1422 | 40 | 0.07 | 10.11 |
| 1423 | 143 | 0.24 | 10.35 |
| 1424 | 32 | 0.05 | 10.40 |
| 1425 | 82 | 0.14 | 10.54 |
| 1426 | 83 | 0.14 | 10.67 |
| 1427 | 53 | 0.09 | 10.76 |
| 1428 | 62 | 0.10 | 10.86 |
| 1429 | 88 | 0.15 | 11.01 |
| 1430 | 49 | 0.08 | 11.09 |
| 1431 | 68 | 0.11 | 11.21 |
| 1432 | 145 | 0.24 | 11.45 |
| 1433 | 41 | 0.07 | 11.52 |
| 1434 | 63 | 0.10 | 11.62 |
| 1435 | 121 | 0.20 | 11.82 |
| 1436 | 56 | 0.09 | 11.91 |
| 1437 | 106 | 0.18 | 12.09 |
| 1438 | 104 | 0.17 | 12.26 |
| 1439 | 59 | 0.10 | 12.36 |
| 1440 | 131 | 0.22 | 12.58 |
| 1441 | 63 | 0.10 | 12.68 |
| 1442 | 68 | 0.11 | 12.80 |
| 1443 | 141 | 0.23 | 13.03 |
| 1444 | 74 | 0.12 | 13.16 |
| 1445 | 76 | 0.13 | 13.28 |
| 1446 | 130 | 0.22 | 13.50 |
| 1447 | 70 | 0.12 | 13.61 |
| 1448 | 91 | 0.15 | 13.77 |
| 1449 | 121 | 0.20 | 13.97 |
| 1450 | 69 | 0.11 | 14.08 |
| 1451 | 124 | 0.21 | 14.29 |
| 1452 | 80 | 0.13 | 14.42 |
| 1453 | 127 | 0.21 | 14.63 |
| 1454 | 107 | 0.18 | 14.81 |
| 1455 | 109 | 0.18 | 14.99 |
| 1456 | 124 | 0.21 | 15.20 |
| 1457 | 89 | 0.15 | 15.35 |
| 1458 | 103 | 0.17 | 15.52 |
| 1459 | 78 | 0.13 | 15.65 |
| 1460 | 122 | 0.20 | 15.85 |
| 1461 | 152 | 0.25 | 16.10 |
| 1462 | 157 | 0.26 | 16.36 |
| 1463 | 110 | 0.18 | 16.55 |
| 1464 | 134 | 0.22 | 16.77 |
| 1465 | 158 | 0.26 | 17.03 |
| 1466 | 113 | 0.19 | 17.22 |
| 1467 | 105 | 0.17 | 17.39 |
| 1468 | 147 | 0.24 | 17.64 |
| 1469 | 119 | 0.20 | 17.84 |
| 1470 | 196 | 0.33 | 18.16 |
| 1471 | 120 | 0.20 | 18.36 |
| 1472 | 251 | 0.42 | 18.78 |
| 1473 | 176 | 0.29 | 19.07 |
| 1474 | 44 | 0.07 | 19.15 |
| 1475 | 338 | 0.56 | 19.71 |
| 1476 | 115 | 0.19 | 19.90 |
| 1477 | 38 | 0.06 | 19.96 |
| 1478 | 303 | 0.50 | 20.47 |
| 1479 | 151 | 0.25 | 20.72 |
| 1480 | 133 | 0.22 | 20.94 |
| 1481 | 302 | 0.50 | 21.44 |
| 1482 | 83 | 0.14 | 21.58 |
| 1483 | 314 | 0.52 | 22.10 |
| 1484 | 188 | 0.31 | 22.41 |
| 1485 | 67 | 0.11 | 22.52 |
| 1486 | 342 | 0.57 | 23.09 |
| 1487 | 169 | 0.28 | 23.37 |
| 1488 | 161 | 0.27 | 23.64 |
| 1489 | 281 | 0.47 | 24.11 |
| 1490 | 171 | 0.28 | 24.39 |
| 1491 | 389 | 0.65 | 25.04 |
| 1492 | 166 | 0.28 | 25.32 |
| 1493 | 194 | 0.32 | 25.64 |
| 1494 | 341 | 0.57 | 26.21 |
| 1495 | 287 | 0.48 | 26.68 |
| 1496 | 219 | 0.36 | 27.05 |
| 1497 | 302 | 0.50 | 27.55 |
| 1498 | 244 | 0.41 | 27.96 |
| 1499 | 370 | 0.62 | 28.57 |
| 1500 | 261 | 0.43 | 29.01 |
| 1501 | 252 | 0.42 | 29.43 |
| 1502 | 194 | 0.32 | 29.75 |
| 1503 | 426 | 0.71 | 30.46 |
| 1504 | 202 | 0.34 | 30.79 |
| 1505 | 329 | 0.55 | 31.34 |
| 1506 | 298 | 0.50 | 31.83 |
| 1507 | 193 | 0.32 | 32.16 |
| 1508 | 427 | 0.71 | 32.87 |
| 1509 | 417 | 0.69 | 33.56 |
| 1510 | 8 | 0.01 | 33.57 |
| 1511 | 573 | 0.95 | 34.53 |
| 1512 | 295 | 0.49 | 35.02 |
| 1513 | 145 | 0.24 | 35.26 |
| 1514 | 482 | 0.80 | 36.06 |
| 1515 | 261 | 0.43 | 36.49 |
| 1516 | 241 | 0.40 | 36.89 |
| 1517 | 536 | 0.89 | 37.79 |
| 1518 | 141 | 0.23 | 38.02 |
| 1519 | 399 | 0.66 | 38.68 |
| 1520 | 395 | 0.66 | 39.34 |
| 1521 | 125 | 0.21 | 39.55 |
| 1522 | 468 | 0.78 | 40.33 |
| 1523 | 339 | 0.56 | 40.89 |
| 1524 | 337 | 0.56 | 41.45 |
| 1525 | 332 | 0.55 | 42.00 |
| 1526 | 305 | 0.51 | 42.51 |
| 1527 | 604 | 1.00 | 43.51 |
| 1528 | 186 | 0.31 | 43.82 |
| 1529 | 175 | 0.29 | 44.12 |
| 1530 | 696 | 1.16 | 45.27 |
| 1531 | 207 | 0.34 | 45.62 |
| 1532 | 440 | 0.73 | 46.35 |
| 1533 | 361 | 0.60 | 46.95 |
| 1534 | 239 | 0.40 | 47.35 |
| 1535 | 509 | 0.85 | 48.19 |
| 1536 | 366 | 0.61 | 48.80 |
| 1537 | 265 | 0.44 | 49.24 |
| 1538 | 640 | 1.06 | 50.31 |
| 1539 | 336 | 0.56 | 50.87 |
| 1540 | 69 | 0.11 | 50.98 |
| 1541 | 755 | 1.26 | 52.24 |
| 1542 | 387 | 0.64 | 52.88 |
| 1543 | 7 | 0.01 | 52.89 |
| 1544 | 853 | 1.42 | 54.31 |
| 1545 | 169 | 0.28 | 54.59 |
| 1546 | 260 | 0.43 | 55.02 |
| 1547 | 694 | 1.15 | 56.18 |
| 1548 | 197 | 0.33 | 56.51 |
| 1549 | 307 | 0.51 | 57.02 |
| 1550 | 539 | 0.90 | 57.91 |
| 1551 | 270 | 0.45 | 58.36 |
| 1552 | 325 | 0.54 | 58.90 |
| 1553 | 721 | 1.20 | 60.10 |
| 1554 | 204 | 0.34 | 60.44 |
| 1555 | 252 | 0.42 | 60.86 |
| 1556 | 552 | 0.92 | 61.78 |
| 1557 | 305 | 0.51 | 62.28 |
| 1558 | 512 | 0.85 | 63.14 |
| 1559 | 282 | 0.47 | 63.60 |
| 1560 | 412 | 0.69 | 64.29 |
| 1561 | 384 | 0.64 | 64.93 |
| 1562 | 218 | 0.36 | 65.29 |
| 1563 | 714 | 1.19 | 66.48 |
| 1564 | 243 | 0.40 | 66.88 |
| 1565 | 56 | 0.09 | 66.98 |
| 1566 | 729 | 1.21 | 68.19 |
| 1567 | 514 | 0.85 | 69.04 |
| 1568 | 99 | 0.16 | 69.21 |
| 1569 | 208 | 0.35 | 69.55 |
| 1570 | 641 | 1.07 | 70.62 |
| 1571 | 254 | 0.42 | 71.04 |
| 1572 | 364 | 0.61 | 71.65 |
| 1573 | 1 | 0.00 | 71.65 |
| 1574 | 714 | 1.19 | 72.84 |
| 1575 | 339 | 0.56 | 73.40 |
| 1576 | 255 | 0.42 | 73.82 |
| 1577 | 453 | 0.75 | 74.58 |
| 1578 | 240 | 0.40 | 74.98 |
| 1579 | 291 | 0.48 | 75.46 |
| 1580 | 144 | 0.24 | 75.70 |
| 1581 | 506 | 0.84 | 76.54 |
| 1582 | 413 | 0.69 | 77.23 |
| 1583 | 401 | 0.67 | 77.90 |
| 1584 | 54 | 0.09 | 77.99 |
| 1585 | 20 | 0.03 | 78.02 |
| 1586 | 870 | 1.45 | 79.47 |
| 1587 | 286 | 0.48 | 79.94 |
| 1588 | 8 | 0.01 | 79.95 |
| 1589 | 254 | 0.42 | 80.38 |
| 1590 | 675 | 1.12 | 81.50 |
| 1593 | 574 | 0.95 | 82.45 |
| 1594 | 331 | 0.55 | 83.00 |
| 1595 | 197 | 0.33 | 83.33 |
| 1596 | 443 | 0.74 | 84.07 |
| 1598 | 21 | 0.03 | 84.10 |
| 1599 | 514 | 0.85 | 84.96 |
| 1600 | 505 | 0.84 | 85.80 |
| 1601 | 15 | 0.02 | 85.82 |
| 1603 | 419 | 0.70 | 86.52 |
| 1604 | 27 | 0.04 | 86.57 |
| 1605 | 292 | 0.49 | 87.05 |
| 1606 | 239 | 0.40 | 87.45 |
| 1607 | 129 | 0.21 | 87.66 |
| 1608 | 17 | 0.03 | 87.69 |
| 1609 | 455 | 0.76 | 88.45 |
| 1610 | 243 | 0.40 | 88.85 |
| 1612 | 3 | 0.00 | 88.86 |
| 1613 | 62 | 0.10 | 88.96 |
| 1614 | 569 | 0.95 | 89.91 |
| 1615 | 148 | 0.25 | 90.15 |
| 1616 | 75 | 0.12 | 90.28 |
| 1617 | 1 | 0.00 | 90.28 |
| 1618 | 261 | 0.43 | 90.71 |
| 1619 | 280 | 0.47 | 91.18 |
| 1620 | 3 | 0.00 | 91.18 |
| 1622 | 231 | 0.38 | 91.57 |
| 1623 | 275 | 0.46 | 92.03 |
| 1625 | 1 | 0.00 | 92.03 |
| 1626 | 310 | 0.52 | 92.54 |
| 1627 | 211 | 0.35 | 92.89 |
| 1628 | 7 | 0.01 | 92.91 |
| 1629 | 114 | 0.19 | 93.09 |
| 1631 | 59 | 0.10 | 93.19 |
| 1633 | 478 | 0.79 | 93.99 |
| 1634 | 10 | 0.02 | 94.00 |
| 1636 | 12 | 0.02 | 94.02 |
| 1638 | 176 | 0.29 | 94.32 |
| 1639 | 165 | 0.27 | 94.59 |
| 1641 | 56 | 0.09 | 94.68 |
| 1642 | 256 | 0.43 | 95.11 |
| 1645 | 22 | 0.04 | 95.15 |
| 1646 | 114 | 0.19 | 95.34 |
| 1647 | 189 | 0.31 | 95.65 |
| 1648 | 38 | 0.06 | 95.71 |
| 1650 | 9 | 0.01 | 95.73 |
| 1651 | 34 | 0.06 | 95.79 |
| 1652 | 218 | 0.36 | 96.15 |
| 1655 | 127 | 0.21 | 96.36 |
| 1658 | 74 | 0.12 | 96.48 |
| 1659 | 130 | 0.22 | 96.70 |
| 1662 | 86 | 0.14 | 96.84 |
| 1665 | 1 | 0.00 | 96.84 |
| 1666 | 249 | 0.41 | 97.26 |
| 1669 | 10 | 0.02 | 97.27 |
| 1670 | 120 | 0.20 | 97.47 |
| 1672 | 1 | 0.00 | 97.48 |
| 1674 | 79 | 0.13 | 97.61 |
| 1675 | 111 | 0.18 | 97.79 |
| 1678 | 2 | 0.00 | 97.79 |
| 1679 | 118 | 0.20 | 97.99 |
| 1682 | 12 | 0.02 | 98.01 |
| 1683 | 2 | 0.00 | 98.01 |
| 1685 | 149 | 0.25 | 98.26 |
| 1686 | 2 | 0.00 | 98.27 |
| 1688 | 1 | 0.00 | 98.27 |
| 1689 | 1 | 0.00 | 98.27 |
| 1691 | 92 | 0.15 | 98.42 |
| 1694 | 5 | 0.01 | 98.43 |
| 1697 | 4 | 0.01 | 98.44 |
| 1698 | 77 | 0.13 | 98.56 |
| 1699 | 4 | 0.01 | 98.57 |
| 1702 | 31 | 0.05 | 98.62 |
| 1705 | 5 | 0.01 | 98.63 |
| 1707 | 58 | 0.10 | 98.73 |
| 1708 | 9 | 0.01 | 98.74 |
| 1711 | 16 | 0.03 | 98.77 |
| 1712 | 6 | 0.01 | 98.78 |
| 1714 | 14 | 0.02 | 98.80 |
| 1718 | 54 | 0.09 | 98.89 |
| 1721 | 27 | 0.04 | 98.94 |
| 1725 | 34 | 0.06 | 98.99 |
| 1729 | 43 | 0.07 | 99.07 |
| 1731 | 3 | 0.00 | 99.07 |
| 1733 | 37 | 0.06 | 99.13 |
| 1734 | 13 | 0.02 | 99.15 |
| 1736 | 1 | 0.00 | 99.16 |
| 1738 | 51 | 0.08 | 99.24 |
| 1741 | 1 | 0.00 | 99.24 |
| 1742 | 46 | 0.08 | 99.32 |
| 1744 | 4 | 0.01 | 99.32 |
| 1747 | 1 | 0.00 | 99.33 |
| 1748 | 45 | 0.07 | 99.40 |
| 1750 | 1 | 0.00 | 99.40 |
| 1753 | 2 | 0.00 | 99.41 |
| 1754 | 51 | 0.08 | 99.49 |
| 1757 | 4 | 0.01 | 99.50 |
| 1760 | 4 | 0.01 | 99.50 |
| 1761 | 45 | 0.07 | 99.58 |
| 1764 | 12 | 0.02 | 99.60 |
| 1768 | 7 | 0.01 | 99.61 |
| 1770 | 49 | 0.08 | 99.69 |
| 1772 | 11 | 0.02 | 99.71 |
| 1777 | 8 | 0.01 | 99.72 |
| 1781 | 34 | 0.06 | 99.78 |
| 1787 | 17 | 0.03 | 99.81 |
| 1793 | 17 | 0.03 | 99.84 |
| 1796 | 1 | 0.00 | 99.84 |
| 1797 | 14 | 0.02 | 99.86 |
| 1800 | 17 | 0.03 | 99.89 |
| 1809 | 22 | 0.04 | 99.93 |
| 1820 | 16 | 0.03 | 99.95 |
| 1827 | 8 | 0.01 | 99.97 |
| 1836 | 10 | 0.02 | 99.98 |
| 1848 | 2 | 0.00 | 99.99 |
| 1866 | 4 | 0.01 | 99.99 |
| 1911 | 2 | 0.00 | 100.00 |
| 1950 | 2 | 0.00 | 100.00 |

Table 7.C.37 Scale Score Frequency Distribution—Overall Score, Grade Ten

|  |  |  |  |
| --- | --- | --- | --- |
| **Scale Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 1150 | 1 | 0.00 | 0.00 |
| 1224 | 1 | 0.00 | 0.00 |
| 1274 | 1 | 0.00 | 0.01 |
| 1277 | 1 | 0.00 | 0.01 |
| 1279 | 1 | 0.00 | 0.01 |
| 1284 | 1 | 0.00 | 0.01 |
| 1285 | 1 | 0.00 | 0.01 |
| 1290 | 1 | 0.00 | 0.01 |
| 1291 | 2 | 0.00 | 0.02 |
| 1299 | 5 | 0.01 | 0.03 |
| 1300 | 1 | 0.00 | 0.03 |
| 1302 | 9 | 0.02 | 0.04 |
| 1306 | 3 | 0.01 | 0.05 |
| 1309 | 4 | 0.01 | 0.06 |
| 1310 | 4 | 0.01 | 0.06 |
| 1314 | 2 | 0.00 | 0.07 |
| 1315 | 2 | 0.00 | 0.07 |
| 1316 | 7 | 0.01 | 0.08 |
| 1317 | 1 | 0.00 | 0.08 |
| 1320 | 2 | 0.00 | 0.09 |
| 1322 | 11 | 0.02 | 0.11 |
| 1323 | 5 | 0.01 | 0.12 |
| 1325 | 5 | 0.01 | 0.12 |
| 1326 | 6 | 0.01 | 0.13 |
| 1327 | 8 | 0.01 | 0.15 |
| 1328 | 1 | 0.00 | 0.15 |
| 1329 | 6 | 0.01 | 0.16 |
| 1331 | 11 | 0.02 | 0.18 |
| 1333 | 5 | 0.01 | 0.19 |
| 1335 | 13 | 0.02 | 0.21 |
| 1338 | 5 | 0.01 | 0.22 |
| 1339 | 31 | 0.05 | 0.27 |
| 1342 | 2 | 0.00 | 0.28 |
| 1344 | 16 | 0.03 | 0.31 |
| 1345 | 7 | 0.01 | 0.32 |
| 1346 | 33 | 0.06 | 0.38 |
| 1348 | 48 | 0.08 | 0.46 |
| 1349 | 1 | 0.00 | 0.46 |
| 1350 | 1 | 0.00 | 0.46 |
| 1351 | 4 | 0.01 | 0.47 |
| 1352 | 59 | 0.10 | 0.57 |
| 1353 | 6 | 0.01 | 0.58 |
| 1354 | 2 | 0.00 | 0.59 |
| 1355 | 18 | 0.03 | 0.62 |
| 1356 | 45 | 0.08 | 0.70 |
| 1357 | 40 | 0.07 | 0.77 |
| 1358 | 11 | 0.02 | 0.78 |
| 1359 | 9 | 0.02 | 0.80 |
| 1361 | 66 | 0.12 | 0.92 |
| 1362 | 10 | 0.02 | 0.93 |
| 1363 | 40 | 0.07 | 1.00 |
| 1364 | 1 | 0.00 | 1.00 |
| 1365 | 46 | 0.08 | 1.08 |
| 1366 | 60 | 0.10 | 1.19 |
| 1367 | 4 | 0.01 | 1.20 |
| 1368 | 19 | 0.03 | 1.23 |
| 1369 | 93 | 0.16 | 1.39 |
| 1370 | 32 | 0.06 | 1.45 |
| 1371 | 63 | 0.11 | 1.56 |
| 1372 | 26 | 0.05 | 1.60 |
| 1373 | 15 | 0.03 | 1.63 |
| 1374 | 74 | 0.13 | 1.76 |
| 1375 | 111 | 0.19 | 1.95 |
| 1376 | 48 | 0.08 | 2.04 |
| 1377 | 7 | 0.01 | 2.05 |
| 1378 | 82 | 0.14 | 2.19 |
| 1379 | 73 | 0.13 | 2.32 |
| 1380 | 20 | 0.03 | 2.35 |
| 1381 | 149 | 0.26 | 2.61 |
| 1383 | 84 | 0.15 | 2.76 |
| 1384 | 12 | 0.02 | 2.78 |
| 1385 | 103 | 0.18 | 2.96 |
| 1386 | 158 | 0.28 | 3.24 |
| 1387 | 28 | 0.05 | 3.28 |
| 1388 | 11 | 0.02 | 3.30 |
| 1389 | 159 | 0.28 | 3.58 |
| 1390 | 45 | 0.08 | 3.66 |
| 1391 | 114 | 0.20 | 3.86 |
| 1393 | 141 | 0.25 | 4.10 |
| 1394 | 23 | 0.04 | 4.14 |
| 1395 | 187 | 0.33 | 4.47 |
| 1396 | 74 | 0.13 | 4.60 |
| 1397 | 15 | 0.03 | 4.63 |
| 1398 | 93 | 0.16 | 4.79 |
| 1399 | 123 | 0.21 | 5.00 |
| 1400 | 54 | 0.09 | 5.10 |
| 1401 | 86 | 0.15 | 5.25 |
| 1402 | 64 | 0.11 | 5.36 |
| 1403 | 105 | 0.18 | 5.54 |
| 1404 | 66 | 0.12 | 5.66 |
| 1405 | 99 | 0.17 | 5.83 |
| 1406 | 68 | 0.12 | 5.95 |
| 1407 | 141 | 0.25 | 6.19 |
| 1408 | 18 | 0.03 | 6.23 |
| 1409 | 62 | 0.11 | 6.33 |
| 1410 | 140 | 0.24 | 6.58 |
| 1411 | 66 | 0.12 | 6.69 |
| 1412 | 61 | 0.11 | 6.80 |
| 1413 | 62 | 0.11 | 6.91 |
| 1414 | 135 | 0.24 | 7.14 |
| 1415 | 38 | 0.07 | 7.21 |
| 1416 | 84 | 0.15 | 7.36 |
| 1417 | 131 | 0.23 | 7.58 |
| 1418 | 41 | 0.07 | 7.66 |
| 1419 | 23 | 0.04 | 7.70 |
| 1420 | 121 | 0.21 | 7.91 |
| 1421 | 59 | 0.10 | 8.01 |
| 1422 | 52 | 0.09 | 8.10 |
| 1423 | 152 | 0.27 | 8.37 |
| 1424 | 39 | 0.07 | 8.43 |
| 1425 | 96 | 0.17 | 8.60 |
| 1426 | 105 | 0.18 | 8.78 |
| 1427 | 53 | 0.09 | 8.88 |
| 1428 | 59 | 0.10 | 8.98 |
| 1429 | 114 | 0.20 | 9.18 |
| 1430 | 59 | 0.10 | 9.28 |
| 1431 | 61 | 0.11 | 9.39 |
| 1432 | 149 | 0.26 | 9.65 |
| 1433 | 36 | 0.06 | 9.71 |
| 1434 | 64 | 0.11 | 9.82 |
| 1435 | 118 | 0.21 | 10.03 |
| 1436 | 52 | 0.09 | 10.12 |
| 1437 | 109 | 0.19 | 10.31 |
| 1438 | 100 | 0.17 | 10.48 |
| 1439 | 50 | 0.09 | 10.57 |
| 1440 | 131 | 0.23 | 10.80 |
| 1441 | 56 | 0.10 | 10.90 |
| 1442 | 75 | 0.13 | 11.03 |
| 1443 | 116 | 0.20 | 11.23 |
| 1444 | 73 | 0.13 | 11.36 |
| 1445 | 75 | 0.13 | 11.49 |
| 1446 | 137 | 0.24 | 11.73 |
| 1447 | 75 | 0.13 | 11.86 |
| 1448 | 83 | 0.14 | 12.00 |
| 1449 | 106 | 0.18 | 12.19 |
| 1450 | 61 | 0.11 | 12.29 |
| 1451 | 89 | 0.16 | 12.45 |
| 1452 | 69 | 0.12 | 12.57 |
| 1453 | 117 | 0.20 | 12.77 |
| 1454 | 90 | 0.16 | 12.93 |
| 1455 | 115 | 0.20 | 13.13 |
| 1456 | 107 | 0.19 | 13.32 |
| 1457 | 89 | 0.16 | 13.47 |
| 1458 | 99 | 0.17 | 13.65 |
| 1459 | 89 | 0.16 | 13.80 |
| 1460 | 95 | 0.17 | 13.97 |
| 1461 | 134 | 0.23 | 14.20 |
| 1462 | 113 | 0.20 | 14.40 |
| 1463 | 101 | 0.18 | 14.57 |
| 1464 | 122 | 0.21 | 14.79 |
| 1465 | 138 | 0.24 | 15.03 |
| 1466 | 93 | 0.16 | 15.19 |
| 1467 | 96 | 0.17 | 15.36 |
| 1468 | 135 | 0.24 | 15.59 |
| 1469 | 113 | 0.20 | 15.79 |
| 1470 | 163 | 0.28 | 16.07 |
| 1471 | 109 | 0.19 | 16.26 |
| 1472 | 162 | 0.28 | 16.55 |
| 1473 | 117 | 0.20 | 16.75 |
| 1474 | 33 | 0.06 | 16.81 |
| 1475 | 267 | 0.47 | 17.27 |
| 1476 | 106 | 0.18 | 17.46 |
| 1477 | 38 | 0.07 | 17.52 |
| 1478 | 274 | 0.48 | 18.00 |
| 1479 | 152 | 0.27 | 18.27 |
| 1480 | 115 | 0.20 | 18.47 |
| 1481 | 266 | 0.46 | 18.93 |
| 1482 | 90 | 0.16 | 19.09 |
| 1483 | 268 | 0.47 | 19.56 |
| 1484 | 149 | 0.26 | 19.82 |
| 1485 | 42 | 0.07 | 19.89 |
| 1486 | 301 | 0.53 | 20.42 |
| 1487 | 117 | 0.20 | 20.62 |
| 1488 | 149 | 0.26 | 20.88 |
| 1489 | 237 | 0.41 | 21.29 |
| 1490 | 147 | 0.26 | 21.55 |
| 1491 | 292 | 0.51 | 22.06 |
| 1492 | 146 | 0.25 | 22.31 |
| 1493 | 153 | 0.27 | 22.58 |
| 1494 | 246 | 0.43 | 23.01 |
| 1495 | 221 | 0.39 | 23.39 |
| 1496 | 153 | 0.27 | 23.66 |
| 1497 | 203 | 0.35 | 24.02 |
| 1498 | 211 | 0.37 | 24.38 |
| 1499 | 278 | 0.48 | 24.87 |
| 1500 | 233 | 0.41 | 25.27 |
| 1501 | 222 | 0.39 | 25.66 |
| 1502 | 148 | 0.26 | 25.92 |
| 1503 | 304 | 0.53 | 26.45 |
| 1504 | 164 | 0.29 | 26.74 |
| 1505 | 247 | 0.43 | 27.17 |
| 1506 | 220 | 0.38 | 27.55 |
| 1507 | 156 | 0.27 | 27.82 |
| 1508 | 303 | 0.53 | 28.35 |
| 1509 | 340 | 0.59 | 28.94 |
| 1510 | 8 | 0.01 | 28.96 |
| 1511 | 520 | 0.91 | 29.87 |
| 1512 | 216 | 0.38 | 30.24 |
| 1513 | 99 | 0.17 | 30.42 |
| 1514 | 397 | 0.69 | 31.11 |
| 1515 | 240 | 0.42 | 31.53 |
| 1516 | 209 | 0.36 | 31.89 |
| 1517 | 413 | 0.72 | 32.61 |
| 1518 | 114 | 0.20 | 32.81 |
| 1519 | 324 | 0.57 | 33.38 |
| 1520 | 291 | 0.51 | 33.88 |
| 1521 | 104 | 0.18 | 34.06 |
| 1522 | 410 | 0.72 | 34.78 |
| 1523 | 283 | 0.49 | 35.27 |
| 1524 | 278 | 0.48 | 35.76 |
| 1525 | 277 | 0.48 | 36.24 |
| 1526 | 228 | 0.40 | 36.64 |
| 1527 | 507 | 0.88 | 37.52 |
| 1528 | 172 | 0.30 | 37.82 |
| 1529 | 157 | 0.27 | 38.10 |
| 1530 | 562 | 0.98 | 39.08 |
| 1531 | 191 | 0.33 | 39.41 |
| 1532 | 394 | 0.69 | 40.10 |
| 1533 | 294 | 0.51 | 40.61 |
| 1534 | 207 | 0.36 | 40.97 |
| 1535 | 396 | 0.69 | 41.66 |
| 1536 | 279 | 0.49 | 42.15 |
| 1537 | 193 | 0.34 | 42.49 |
| 1538 | 512 | 0.89 | 43.38 |
| 1539 | 290 | 0.51 | 43.88 |
| 1540 | 71 | 0.12 | 44.01 |
| 1541 | 602 | 1.05 | 45.06 |
| 1542 | 346 | 0.60 | 45.66 |
| 1543 | 7 | 0.01 | 45.67 |
| 1544 | 710 | 1.24 | 46.91 |
| 1545 | 139 | 0.24 | 47.16 |
| 1546 | 274 | 0.48 | 47.63 |
| 1547 | 586 | 1.02 | 48.66 |
| 1548 | 175 | 0.31 | 48.96 |
| 1549 | 293 | 0.51 | 49.47 |
| 1550 | 433 | 0.76 | 50.23 |
| 1551 | 190 | 0.33 | 50.56 |
| 1552 | 249 | 0.43 | 50.99 |
| 1553 | 646 | 1.13 | 52.12 |
| 1554 | 202 | 0.35 | 52.47 |
| 1555 | 235 | 0.41 | 52.88 |
| 1556 | 427 | 0.74 | 53.63 |
| 1557 | 294 | 0.51 | 54.14 |
| 1558 | 466 | 0.81 | 54.95 |
| 1559 | 259 | 0.45 | 55.40 |
| 1560 | 354 | 0.62 | 56.02 |
| 1561 | 378 | 0.66 | 56.68 |
| 1562 | 184 | 0.32 | 57.00 |
| 1563 | 660 | 1.15 | 58.15 |
| 1564 | 225 | 0.39 | 58.55 |
| 1565 | 47 | 0.08 | 58.63 |
| 1566 | 644 | 1.12 | 59.75 |
| 1567 | 528 | 0.92 | 60.67 |
| 1568 | 63 | 0.11 | 60.78 |
| 1569 | 159 | 0.28 | 61.06 |
| 1570 | 605 | 1.06 | 62.11 |
| 1571 | 220 | 0.38 | 62.50 |
| 1572 | 392 | 0.68 | 63.18 |
| 1573 | 3 | 0.01 | 63.19 |
| 1574 | 699 | 1.22 | 64.41 |
| 1575 | 338 | 0.59 | 65.00 |
| 1576 | 220 | 0.38 | 65.38 |
| 1577 | 428 | 0.75 | 66.13 |
| 1578 | 255 | 0.44 | 66.57 |
| 1579 | 285 | 0.50 | 67.07 |
| 1580 | 139 | 0.24 | 67.31 |
| 1581 | 529 | 0.92 | 68.23 |
| 1582 | 370 | 0.65 | 68.88 |
| 1583 | 387 | 0.68 | 69.55 |
| 1584 | 54 | 0.09 | 69.65 |
| 1585 | 17 | 0.03 | 69.68 |
| 1586 | 960 | 1.67 | 71.35 |
| 1587 | 276 | 0.48 | 71.83 |
| 1588 | 9 | 0.02 | 71.85 |
| 1589 | 250 | 0.44 | 72.29 |
| 1590 | 739 | 1.29 | 73.57 |
| 1593 | 610 | 1.06 | 74.64 |
| 1594 | 367 | 0.64 | 75.28 |
| 1595 | 242 | 0.42 | 75.70 |
| 1596 | 448 | 0.78 | 76.48 |
| 1598 | 18 | 0.03 | 76.51 |
| 1599 | 605 | 1.06 | 77.57 |
| 1600 | 559 | 0.98 | 78.54 |
| 1601 | 29 | 0.05 | 78.59 |
| 1603 | 465 | 0.81 | 79.41 |
| 1604 | 38 | 0.07 | 79.47 |
| 1605 | 367 | 0.64 | 80.11 |
| 1606 | 315 | 0.55 | 80.66 |
| 1607 | 170 | 0.30 | 80.96 |
| 1608 | 34 | 0.06 | 81.02 |
| 1609 | 625 | 1.09 | 82.11 |
| 1610 | 306 | 0.53 | 82.64 |
| 1613 | 60 | 0.10 | 82.75 |
| 1614 | 747 | 1.30 | 84.05 |
| 1615 | 215 | 0.38 | 84.42 |
| 1616 | 80 | 0.14 | 84.56 |
| 1618 | 297 | 0.52 | 85.08 |
| 1619 | 372 | 0.65 | 85.73 |
| 1620 | 5 | 0.01 | 85.74 |
| 1622 | 325 | 0.57 | 86.31 |
| 1623 | 327 | 0.57 | 86.88 |
| 1626 | 401 | 0.70 | 87.58 |
| 1627 | 314 | 0.55 | 88.12 |
| 1628 | 7 | 0.01 | 88.14 |
| 1629 | 185 | 0.32 | 88.46 |
| 1630 | 2 | 0.00 | 88.46 |
| 1631 | 97 | 0.17 | 88.63 |
| 1633 | 710 | 1.24 | 89.87 |
| 1634 | 8 | 0.01 | 89.88 |
| 1636 | 21 | 0.04 | 89.92 |
| 1638 | 242 | 0.42 | 90.34 |
| 1639 | 262 | 0.46 | 90.80 |
| 1641 | 90 | 0.16 | 90.96 |
| 1642 | 368 | 0.64 | 91.60 |
| 1645 | 27 | 0.05 | 91.64 |
| 1646 | 175 | 0.31 | 91.95 |
| 1647 | 294 | 0.51 | 92.46 |
| 1648 | 43 | 0.08 | 92.54 |
| 1650 | 5 | 0.01 | 92.55 |
| 1651 | 55 | 0.10 | 92.64 |
| 1652 | 334 | 0.58 | 93.23 |
| 1655 | 183 | 0.32 | 93.54 |
| 1658 | 88 | 0.15 | 93.70 |
| 1659 | 228 | 0.40 | 94.10 |
| 1660 | 1 | 0.00 | 94.10 |
| 1662 | 130 | 0.23 | 94.32 |
| 1665 | 1 | 0.00 | 94.33 |
| 1666 | 360 | 0.63 | 94.95 |
| 1669 | 15 | 0.03 | 94.98 |
| 1670 | 179 | 0.31 | 95.29 |
| 1672 | 2 | 0.00 | 95.30 |
| 1674 | 129 | 0.23 | 95.52 |
| 1675 | 214 | 0.37 | 95.89 |
| 1679 | 221 | 0.39 | 96.28 |
| 1682 | 29 | 0.05 | 96.33 |
| 1683 | 1 | 0.00 | 96.33 |
| 1685 | 274 | 0.48 | 96.81 |
| 1686 | 2 | 0.00 | 96.81 |
| 1688 | 3 | 0.01 | 96.82 |
| 1689 | 2 | 0.00 | 96.82 |
| 1691 | 177 | 0.31 | 97.13 |
| 1694 | 7 | 0.01 | 97.14 |
| 1697 | 2 | 0.00 | 97.15 |
| 1698 | 155 | 0.27 | 97.42 |
| 1699 | 7 | 0.01 | 97.43 |
| 1702 | 33 | 0.06 | 97.49 |
| 1705 | 9 | 0.02 | 97.50 |
| 1707 | 95 | 0.17 | 97.67 |
| 1708 | 14 | 0.02 | 97.69 |
| 1711 | 17 | 0.03 | 97.72 |
| 1712 | 7 | 0.01 | 97.73 |
| 1714 | 18 | 0.03 | 97.77 |
| 1718 | 69 | 0.12 | 97.89 |
| 1721 | 37 | 0.06 | 97.95 |
| 1725 | 49 | 0.09 | 98.04 |
| 1728 | 2 | 0.00 | 98.04 |
| 1729 | 54 | 0.09 | 98.13 |
| 1730 | 1 | 0.00 | 98.14 |
| 1731 | 8 | 0.01 | 98.15 |
| 1733 | 74 | 0.13 | 98.28 |
| 1734 | 38 | 0.07 | 98.34 |
| 1738 | 73 | 0.13 | 98.47 |
| 1741 | 4 | 0.01 | 98.48 |
| 1742 | 97 | 0.17 | 98.65 |
| 1744 | 2 | 0.00 | 98.65 |
| 1747 | 3 | 0.01 | 98.66 |
| 1748 | 112 | 0.20 | 98.85 |
| 1750 | 4 | 0.01 | 98.86 |
| 1753 | 6 | 0.01 | 98.87 |
| 1754 | 106 | 0.18 | 99.05 |
| 1756 | 1 | 0.00 | 99.06 |
| 1757 | 7 | 0.01 | 99.07 |
| 1760 | 7 | 0.01 | 99.08 |
| 1761 | 84 | 0.15 | 99.23 |
| 1764 | 18 | 0.03 | 99.26 |
| 1768 | 16 | 0.03 | 99.29 |
| 1769 | 1 | 0.00 | 99.29 |
| 1770 | 74 | 0.13 | 99.42 |
| 1772 | 20 | 0.03 | 99.45 |
| 1777 | 25 | 0.04 | 99.50 |
| 1781 | 68 | 0.12 | 99.61 |
| 1783 | 2 | 0.00 | 99.62 |
| 1787 | 37 | 0.06 | 99.68 |
| 1793 | 33 | 0.06 | 99.74 |
| 1797 | 18 | 0.03 | 99.77 |
| 1800 | 28 | 0.05 | 99.82 |
| 1809 | 36 | 0.06 | 99.88 |
| 1816 | 1 | 0.00 | 99.88 |
| 1820 | 26 | 0.05 | 99.93 |
| 1827 | 13 | 0.02 | 99.95 |
| 1836 | 11 | 0.02 | 99.97 |
| 1848 | 2 | 0.00 | 99.98 |
| 1866 | 9 | 0.02 | 99.99 |
| 1911 | 2 | 0.00 | 99.99 |
| 1950 | 3 | 0.01 | 100.00 |

Table 7.C.38 Scale Score Frequency Distribution—Overall Score, Grade Eleven

|  |  |  |  |
| --- | --- | --- | --- |
| **Scale Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 1230 | 2 | 0.00 | 0.00 |
| 1287 | 1 | 0.00 | 0.01 |
| 1296 | 1 | 0.00 | 0.01 |
| 1298 | 1 | 0.00 | 0.01 |
| 1320 | 2 | 0.00 | 0.01 |
| 1323 | 1 | 0.00 | 0.02 |
| 1328 | 4 | 0.01 | 0.02 |
| 1330 | 2 | 0.00 | 0.03 |
| 1332 | 4 | 0.01 | 0.04 |
| 1333 | 1 | 0.00 | 0.04 |
| 1335 | 1 | 0.00 | 0.04 |
| 1337 | 4 | 0.01 | 0.05 |
| 1340 | 1 | 0.00 | 0.05 |
| 1341 | 2 | 0.00 | 0.05 |
| 1343 | 12 | 0.02 | 0.08 |
| 1346 | 1 | 0.00 | 0.08 |
| 1348 | 4 | 0.01 | 0.09 |
| 1350 | 7 | 0.01 | 0.10 |
| 1351 | 7 | 0.01 | 0.12 |
| 1353 | 16 | 0.03 | 0.15 |
| 1356 | 8 | 0.02 | 0.17 |
| 1357 | 16 | 0.03 | 0.20 |
| 1358 | 3 | 0.01 | 0.20 |
| 1360 | 38 | 0.08 | 0.28 |
| 1361 | 9 | 0.02 | 0.30 |
| 1362 | 13 | 0.03 | 0.33 |
| 1363 | 4 | 0.01 | 0.33 |
| 1365 | 1 | 0.00 | 0.34 |
| 1366 | 44 | 0.09 | 0.42 |
| 1367 | 19 | 0.04 | 0.46 |
| 1369 | 5 | 0.01 | 0.47 |
| 1370 | 14 | 0.03 | 0.50 |
| 1371 | 43 | 0.09 | 0.59 |
| 1372 | 1 | 0.00 | 0.59 |
| 1373 | 65 | 0.13 | 0.72 |
| 1374 | 11 | 0.02 | 0.74 |
| 1375 | 16 | 0.03 | 0.78 |
| 1376 | 24 | 0.05 | 0.82 |
| 1377 | 10 | 0.02 | 0.85 |
| 1378 | 48 | 0.10 | 0.94 |
| 1379 | 80 | 0.16 | 1.10 |
| 1380 | 38 | 0.08 | 1.18 |
| 1382 | 1 | 0.00 | 1.18 |
| 1383 | 103 | 0.21 | 1.39 |
| 1384 | 37 | 0.07 | 1.47 |
| 1385 | 50 | 0.10 | 1.57 |
| 1386 | 23 | 0.05 | 1.61 |
| 1387 | 65 | 0.13 | 1.74 |
| 1388 | 6 | 0.01 | 1.76 |
| 1389 | 97 | 0.20 | 1.95 |
| 1390 | 87 | 0.18 | 2.13 |
| 1391 | 2 | 0.00 | 2.13 |
| 1392 | 12 | 0.02 | 2.16 |
| 1393 | 112 | 0.23 | 2.38 |
| 1394 | 100 | 0.20 | 2.59 |
| 1395 | 8 | 0.02 | 2.60 |
| 1396 | 110 | 0.22 | 2.82 |
| 1397 | 8 | 0.02 | 2.84 |
| 1398 | 145 | 0.29 | 3.13 |
| 1399 | 65 | 0.13 | 3.27 |
| 1400 | 26 | 0.05 | 3.32 |
| 1401 | 36 | 0.07 | 3.39 |
| 1402 | 185 | 0.37 | 3.76 |
| 1403 | 21 | 0.04 | 3.81 |
| 1404 | 2 | 0.00 | 3.81 |
| 1405 | 117 | 0.24 | 4.05 |
| 1406 | 145 | 0.29 | 4.34 |
| 1407 | 13 | 0.03 | 4.37 |
| 1408 | 68 | 0.14 | 4.50 |
| 1409 | 66 | 0.13 | 4.64 |
| 1410 | 82 | 0.17 | 4.80 |
| 1411 | 64 | 0.13 | 4.93 |
| 1412 | 53 | 0.11 | 5.04 |
| 1413 | 115 | 0.23 | 5.27 |
| 1414 | 28 | 0.06 | 5.33 |
| 1415 | 42 | 0.08 | 5.41 |
| 1416 | 124 | 0.25 | 5.67 |
| 1417 | 47 | 0.10 | 5.76 |
| 1418 | 44 | 0.09 | 5.85 |
| 1419 | 121 | 0.24 | 6.09 |
| 1420 | 58 | 0.12 | 6.21 |
| 1421 | 35 | 0.07 | 6.28 |
| 1422 | 70 | 0.14 | 6.42 |
| 1423 | 91 | 0.18 | 6.61 |
| 1424 | 23 | 0.05 | 6.65 |
| 1425 | 66 | 0.13 | 6.79 |
| 1426 | 99 | 0.20 | 6.99 |
| 1427 | 27 | 0.05 | 7.04 |
| 1428 | 90 | 0.18 | 7.22 |
| 1429 | 45 | 0.09 | 7.32 |
| 1430 | 50 | 0.10 | 7.42 |
| 1431 | 93 | 0.19 | 7.60 |
| 1432 | 63 | 0.13 | 7.73 |
| 1433 | 44 | 0.09 | 7.82 |
| 1434 | 91 | 0.18 | 8.00 |
| 1435 | 36 | 0.07 | 8.08 |
| 1436 | 57 | 0.12 | 8.19 |
| 1437 | 110 | 0.22 | 8.41 |
| 1438 | 35 | 0.07 | 8.49 |
| 1439 | 75 | 0.15 | 8.64 |
| 1440 | 108 | 0.22 | 8.86 |
| 1441 | 55 | 0.11 | 8.97 |
| 1442 | 81 | 0.16 | 9.13 |
| 1443 | 84 | 0.17 | 9.30 |
| 1444 | 55 | 0.11 | 9.41 |
| 1445 | 114 | 0.23 | 9.64 |
| 1446 | 57 | 0.12 | 9.76 |
| 1447 | 65 | 0.13 | 9.89 |
| 1448 | 116 | 0.23 | 10.12 |
| 1449 | 75 | 0.15 | 10.27 |
| 1450 | 100 | 0.20 | 10.48 |
| 1451 | 67 | 0.14 | 10.61 |
| 1452 | 126 | 0.25 | 10.87 |
| 1453 | 85 | 0.17 | 11.04 |
| 1454 | 47 | 0.10 | 11.13 |
| 1455 | 121 | 0.24 | 11.38 |
| 1456 | 99 | 0.20 | 11.58 |
| 1457 | 86 | 0.17 | 11.75 |
| 1458 | 94 | 0.19 | 11.94 |
| 1459 | 104 | 0.21 | 12.15 |
| 1460 | 92 | 0.19 | 12.34 |
| 1461 | 95 | 0.19 | 12.53 |
| 1462 | 108 | 0.22 | 12.75 |
| 1463 | 79 | 0.16 | 12.91 |
| 1464 | 117 | 0.24 | 13.15 |
| 1465 | 96 | 0.19 | 13.34 |
| 1466 | 133 | 0.27 | 13.61 |
| 1467 | 97 | 0.20 | 13.81 |
| 1468 | 87 | 0.18 | 13.98 |
| 1469 | 101 | 0.20 | 14.19 |
| 1470 | 116 | 0.23 | 14.42 |
| 1471 | 110 | 0.22 | 14.64 |
| 1472 | 111 | 0.22 | 14.87 |
| 1473 | 154 | 0.31 | 15.18 |
| 1474 | 99 | 0.20 | 15.38 |
| 1475 | 102 | 0.21 | 15.58 |
| 1476 | 183 | 0.37 | 15.95 |
| 1477 | 67 | 0.14 | 16.09 |
| 1478 | 174 | 0.35 | 16.44 |
| 1479 | 158 | 0.32 | 16.76 |
| 1480 | 33 | 0.07 | 16.83 |
| 1481 | 297 | 0.60 | 17.43 |
| 1482 | 62 | 0.13 | 17.55 |
| 1483 | 6 | 0.01 | 17.57 |
| 1484 | 325 | 0.66 | 18.22 |
| 1485 | 65 | 0.13 | 18.35 |
| 1486 | 165 | 0.33 | 18.69 |
| 1487 | 229 | 0.46 | 19.15 |
| 1488 | 58 | 0.12 | 19.27 |
| 1489 | 293 | 0.59 | 19.86 |
| 1490 | 124 | 0.25 | 20.11 |
| 1491 | 55 | 0.11 | 20.22 |
| 1492 | 310 | 0.63 | 20.85 |
| 1493 | 74 | 0.15 | 21.00 |
| 1494 | 188 | 0.38 | 21.38 |
| 1495 | 321 | 0.65 | 22.03 |
| 1496 | 58 | 0.12 | 22.15 |
| 1497 | 295 | 0.60 | 22.74 |
| 1498 | 186 | 0.38 | 23.12 |
| 1499 | 64 | 0.13 | 23.25 |
| 1500 | 367 | 0.74 | 23.99 |
| 1501 | 127 | 0.26 | 24.25 |
| 1502 | 168 | 0.34 | 24.59 |
| 1503 | 425 | 0.86 | 25.44 |
| 1504 | 94 | 0.19 | 25.63 |
| 1505 | 93 | 0.19 | 25.82 |
| 1506 | 399 | 0.81 | 26.63 |
| 1507 | 168 | 0.34 | 26.97 |
| 1508 | 55 | 0.11 | 27.08 |
| 1509 | 330 | 0.67 | 27.75 |
| 1510 | 278 | 0.56 | 28.31 |
| 1511 | 106 | 0.21 | 28.52 |
| 1512 | 383 | 0.77 | 29.30 |
| 1513 | 237 | 0.48 | 29.78 |
| 1514 | 138 | 0.28 | 30.06 |
| 1515 | 436 | 0.88 | 30.94 |
| 1516 | 167 | 0.34 | 31.28 |
| 1517 | 173 | 0.35 | 31.63 |
| 1518 | 427 | 0.86 | 32.49 |
| 1519 | 260 | 0.53 | 33.01 |
| 1520 | 91 | 0.18 | 33.20 |
| 1521 | 383 | 0.77 | 33.97 |
| 1522 | 449 | 0.91 | 34.88 |
| 1523 | 114 | 0.23 | 35.11 |
| 1524 | 160 | 0.32 | 35.43 |
| 1525 | 543 | 1.10 | 36.53 |
| 1526 | 141 | 0.29 | 36.82 |
| 1527 | 108 | 0.22 | 37.04 |
| 1528 | 557 | 1.13 | 38.16 |
| 1529 | 176 | 0.36 | 38.52 |
| 1530 | 142 | 0.29 | 38.81 |
| 1531 | 364 | 0.74 | 39.54 |
| 1532 | 492 | 0.99 | 40.54 |
| 1533 | 47 | 0.10 | 40.63 |
| 1534 | 123 | 0.25 | 40.88 |
| 1535 | 586 | 1.18 | 42.06 |
| 1536 | 200 | 0.40 | 42.47 |
| 1537 | 172 | 0.35 | 42.82 |
| 1538 | 483 | 0.98 | 43.79 |
| 1539 | 269 | 0.54 | 44.34 |
| 1540 | 169 | 0.34 | 44.68 |
| 1541 | 359 | 0.73 | 45.40 |
| 1542 | 355 | 0.72 | 46.12 |
| 1543 | 293 | 0.59 | 46.71 |
| 1544 | 183 | 0.37 | 47.08 |
| 1545 | 214 | 0.43 | 47.52 |
| 1546 | 430 | 0.87 | 48.39 |
| 1547 | 376 | 0.76 | 49.15 |
| 1548 | 256 | 0.52 | 49.66 |
| 1549 | 128 | 0.26 | 49.92 |
| 1550 | 625 | 1.26 | 51.19 |
| 1551 | 258 | 0.52 | 51.71 |
| 1552 | 183 | 0.37 | 52.08 |
| 1553 | 266 | 0.54 | 52.62 |
| 1554 | 362 | 0.73 | 53.35 |
| 1555 | 292 | 0.59 | 53.94 |
| 1556 | 280 | 0.57 | 54.50 |
| 1557 | 255 | 0.52 | 55.02 |
| 1558 | 271 | 0.55 | 55.57 |
| 1559 | 615 | 1.24 | 56.81 |
| 1560 | 223 | 0.45 | 57.26 |
| 1561 | 84 | 0.17 | 57.43 |
| 1562 | 274 | 0.55 | 57.99 |
| 1563 | 558 | 1.13 | 59.11 |
| 1564 | 356 | 0.72 | 59.83 |
| 1565 | 25 | 0.05 | 59.88 |
| 1566 | 412 | 0.83 | 60.72 |
| 1567 | 421 | 0.85 | 61.57 |
| 1568 | 271 | 0.55 | 62.12 |
| 1569 | 223 | 0.45 | 62.57 |
| 1570 | 432 | 0.87 | 63.44 |
| 1571 | 10 | 0.02 | 63.46 |
| 1572 | 171 | 0.35 | 63.81 |
| 1573 | 745 | 1.51 | 65.31 |
| 1574 | 287 | 0.58 | 65.89 |
| 1576 | 94 | 0.19 | 66.08 |
| 1577 | 790 | 1.60 | 67.68 |
| 1578 | 337 | 0.68 | 68.36 |
| 1579 | 27 | 0.05 | 68.42 |
| 1580 | 356 | 0.72 | 69.14 |
| 1581 | 256 | 0.52 | 69.65 |
| 1582 | 31 | 0.06 | 69.72 |
| 1583 | 612 | 1.24 | 70.95 |
| 1584 | 291 | 0.59 | 71.54 |
| 1585 | 287 | 0.58 | 72.12 |
| 1586 | 149 | 0.30 | 72.42 |
| 1587 | 31 | 0.06 | 72.49 |
| 1588 | 633 | 1.28 | 73.77 |
| 1589 | 78 | 0.16 | 73.92 |
| 1590 | 465 | 0.94 | 74.86 |
| 1591 | 29 | 0.06 | 74.92 |
| 1592 | 72 | 0.15 | 75.07 |
| 1593 | 296 | 0.60 | 75.67 |
| 1594 | 505 | 1.02 | 76.69 |
| 1595 | 319 | 0.64 | 77.33 |
| 1596 | 47 | 0.10 | 77.43 |
| 1597 | 313 | 0.63 | 78.06 |
| 1598 | 376 | 0.76 | 78.82 |
| 1599 | 25 | 0.05 | 78.87 |
| 1600 | 138 | 0.28 | 79.15 |
| 1601 | 290 | 0.59 | 79.74 |
| 1602 | 428 | 0.87 | 80.60 |
| 1603 | 299 | 0.60 | 81.21 |
| 1604 | 36 | 0.07 | 81.28 |
| 1605 | 2 | 0.00 | 81.28 |
| 1606 | 171 | 0.35 | 81.63 |
| 1607 | 504 | 1.02 | 82.65 |
| 1608 | 272 | 0.55 | 83.20 |
| 1609 | 45 | 0.09 | 83.29 |
| 1610 | 200 | 0.40 | 83.69 |
| 1611 | 65 | 0.13 | 83.83 |
| 1612 | 284 | 0.57 | 84.40 |
| 1613 | 20 | 0.04 | 84.44 |
| 1614 | 660 | 1.33 | 85.77 |
| 1615 | 3 | 0.01 | 85.78 |
| 1616 | 4 | 0.01 | 85.79 |
| 1618 | 348 | 0.70 | 86.49 |
| 1619 | 227 | 0.46 | 86.95 |
| 1620 | 3 | 0.01 | 86.96 |
| 1621 | 244 | 0.49 | 87.45 |
| 1622 | 130 | 0.26 | 87.71 |
| 1624 | 536 | 1.08 | 88.80 |
| 1625 | 10 | 0.02 | 88.82 |
| 1626 | 148 | 0.30 | 89.12 |
| 1627 | 10 | 0.02 | 89.14 |
| 1629 | 94 | 0.19 | 89.33 |
| 1630 | 416 | 0.84 | 90.17 |
| 1631 | 210 | 0.42 | 90.59 |
| 1632 | 1 | 0.00 | 90.59 |
| 1633 | 19 | 0.04 | 90.63 |
| 1635 | 194 | 0.39 | 91.03 |
| 1636 | 247 | 0.50 | 91.52 |
| 1637 | 3 | 0.01 | 91.53 |
| 1638 | 173 | 0.35 | 91.88 |
| 1640 | 246 | 0.50 | 92.38 |
| 1641 | 2 | 0.00 | 92.38 |
| 1643 | 240 | 0.49 | 92.87 |
| 1646 | 162 | 0.33 | 93.19 |
| 1647 | 74 | 0.15 | 93.34 |
| 1648 | 86 | 0.17 | 93.52 |
| 1650 | 172 | 0.35 | 93.87 |
| 1651 | 74 | 0.15 | 94.02 |
| 1652 | 193 | 0.39 | 94.41 |
| 1653 | 1 | 0.00 | 94.41 |
| 1654 | 2 | 0.00 | 94.41 |
| 1656 | 112 | 0.23 | 94.64 |
| 1659 | 159 | 0.32 | 94.96 |
| 1660 | 281 | 0.57 | 95.53 |
| 1665 | 2 | 0.00 | 95.53 |
| 1666 | 256 | 0.52 | 96.05 |
| 1667 | 15 | 0.03 | 96.08 |
| 1668 | 2 | 0.00 | 96.08 |
| 1669 | 1 | 0.00 | 96.09 |
| 1671 | 122 | 0.25 | 96.33 |
| 1672 | 54 | 0.11 | 96.44 |
| 1673 | 2 | 0.00 | 96.45 |
| 1675 | 2 | 0.00 | 96.45 |
| 1676 | 96 | 0.19 | 96.64 |
| 1677 | 125 | 0.25 | 96.90 |
| 1679 | 8 | 0.02 | 96.91 |
| 1680 | 3 | 0.01 | 96.92 |
| 1683 | 5 | 0.01 | 96.93 |
| 1684 | 141 | 0.29 | 97.21 |
| 1686 | 4 | 0.01 | 97.22 |
| 1687 | 3 | 0.01 | 97.23 |
| 1688 | 97 | 0.20 | 97.42 |
| 1689 | 19 | 0.04 | 97.46 |
| 1692 | 98 | 0.20 | 97.66 |
| 1693 | 23 | 0.05 | 97.71 |
| 1695 | 6 | 0.01 | 97.72 |
| 1697 | 33 | 0.07 | 97.79 |
| 1701 | 101 | 0.20 | 97.99 |
| 1704 | 39 | 0.08 | 98.07 |
| 1705 | 42 | 0.08 | 98.15 |
| 1710 | 59 | 0.12 | 98.27 |
| 1713 | 63 | 0.13 | 98.40 |
| 1715 | 61 | 0.12 | 98.52 |
| 1716 | 10 | 0.02 | 98.54 |
| 1721 | 78 | 0.16 | 98.70 |
| 1727 | 73 | 0.15 | 98.85 |
| 1730 | 24 | 0.05 | 98.90 |
| 1732 | 17 | 0.03 | 98.93 |
| 1734 | 78 | 0.16 | 99.09 |
| 1737 | 1 | 0.00 | 99.09 |
| 1740 | 1 | 0.00 | 99.09 |
| 1741 | 73 | 0.15 | 99.24 |
| 1743 | 1 | 0.00 | 99.24 |
| 1747 | 1 | 0.00 | 99.25 |
| 1751 | 58 | 0.12 | 99.36 |
| 1753 | 3 | 0.01 | 99.37 |
| 1757 | 3 | 0.01 | 99.38 |
| 1758 | 14 | 0.03 | 99.40 |
| 1759 | 1 | 0.00 | 99.41 |
| 1761 | 7 | 0.01 | 99.42 |
| 1763 | 34 | 0.07 | 99.49 |
| 1765 | 4 | 0.01 | 99.50 |
| 1766 | 1 | 0.00 | 99.50 |
| 1769 | 11 | 0.02 | 99.52 |
| 1774 | 16 | 0.03 | 99.55 |
| 1779 | 49 | 0.10 | 99.65 |
| 1783 | 4 | 0.01 | 99.66 |
| 1785 | 20 | 0.04 | 99.70 |
| 1791 | 23 | 0.05 | 99.75 |
| 1795 | 7 | 0.01 | 99.76 |
| 1798 | 19 | 0.04 | 99.80 |
| 1805 | 26 | 0.05 | 99.85 |
| 1807 | 7 | 0.01 | 99.87 |
| 1811 | 4 | 0.01 | 99.87 |
| 1815 | 14 | 0.03 | 99.90 |
| 1827 | 14 | 0.03 | 99.93 |
| 1837 | 5 | 0.01 | 99.94 |
| 1843 | 12 | 0.02 | 99.97 |
| 1871 | 4 | 0.01 | 99.97 |
| 1886 | 9 | 0.02 | 99.99 |
| 1950 | 4 | 0.01 | 100.00 |

Table 7.C.39 Scale Score Frequency Distribution—Overall Score, Grade Twelve

|  |  |  |  |
| --- | --- | --- | --- |
| **Scale Score** | **Frequency** | **Percent** | **Cumulative Percent** |
| 1150 | 1 | 0.00 | 0.00 |
| 1287 | 1 | 0.00 | 0.01 |
| 1303 | 1 | 0.00 | 0.01 |
| 1320 | 1 | 0.00 | 0.01 |
| 1321 | 1 | 0.00 | 0.01 |
| 1323 | 1 | 0.00 | 0.02 |
| 1325 | 2 | 0.01 | 0.02 |
| 1332 | 2 | 0.01 | 0.03 |
| 1333 | 2 | 0.01 | 0.03 |
| 1335 | 1 | 0.00 | 0.03 |
| 1337 | 2 | 0.01 | 0.04 |
| 1338 | 1 | 0.00 | 0.04 |
| 1341 | 1 | 0.00 | 0.04 |
| 1343 | 7 | 0.02 | 0.06 |
| 1346 | 1 | 0.00 | 0.06 |
| 1348 | 6 | 0.02 | 0.08 |
| 1350 | 7 | 0.02 | 0.10 |
| 1351 | 7 | 0.02 | 0.11 |
| 1352 | 2 | 0.01 | 0.12 |
| 1353 | 8 | 0.02 | 0.14 |
| 1354 | 5 | 0.01 | 0.15 |
| 1356 | 3 | 0.01 | 0.16 |
| 1357 | 16 | 0.04 | 0.20 |
| 1360 | 16 | 0.04 | 0.24 |
| 1361 | 3 | 0.01 | 0.25 |
| 1362 | 7 | 0.02 | 0.26 |
| 1363 | 6 | 0.02 | 0.28 |
| 1365 | 4 | 0.01 | 0.29 |
| 1366 | 46 | 0.12 | 0.41 |
| 1367 | 15 | 0.04 | 0.44 |
| 1369 | 4 | 0.01 | 0.45 |
| 1370 | 9 | 0.02 | 0.48 |
| 1371 | 28 | 0.07 | 0.55 |
| 1372 | 3 | 0.01 | 0.55 |
| 1373 | 43 | 0.11 | 0.66 |
| 1374 | 11 | 0.03 | 0.69 |
| 1375 | 9 | 0.02 | 0.71 |
| 1376 | 18 | 0.05 | 0.76 |
| 1377 | 6 | 0.02 | 0.77 |
| 1378 | 27 | 0.07 | 0.84 |
| 1379 | 61 | 0.15 | 1.00 |
| 1380 | 29 | 0.07 | 1.07 |
| 1382 | 1 | 0.00 | 1.07 |
| 1383 | 65 | 0.16 | 1.24 |
| 1384 | 35 | 0.09 | 1.32 |
| 1385 | 24 | 0.06 | 1.38 |
| 1386 | 24 | 0.06 | 1.45 |
| 1387 | 43 | 0.11 | 1.55 |
| 1388 | 9 | 0.02 | 1.58 |
| 1389 | 92 | 0.23 | 1.81 |
| 1390 | 76 | 0.19 | 2.00 |
| 1392 | 15 | 0.04 | 2.04 |
| 1393 | 86 | 0.22 | 2.25 |
| 1394 | 78 | 0.20 | 2.45 |
| 1395 | 8 | 0.02 | 2.47 |
| 1396 | 65 | 0.16 | 2.64 |
| 1397 | 6 | 0.02 | 2.65 |
| 1398 | 108 | 0.27 | 2.92 |
| 1399 | 38 | 0.10 | 3.02 |
| 1400 | 29 | 0.07 | 3.09 |
| 1401 | 19 | 0.05 | 3.14 |
| 1402 | 158 | 0.40 | 3.54 |
| 1403 | 10 | 0.03 | 3.56 |
| 1404 | 1 | 0.00 | 3.57 |
| 1405 | 73 | 0.18 | 3.75 |
| 1406 | 98 | 0.25 | 4.00 |
| 1407 | 7 | 0.02 | 4.01 |
| 1408 | 60 | 0.15 | 4.17 |
| 1409 | 52 | 0.13 | 4.30 |
| 1410 | 68 | 0.17 | 4.47 |
| 1411 | 45 | 0.11 | 4.58 |
| 1412 | 49 | 0.12 | 4.71 |
| 1413 | 90 | 0.23 | 4.93 |
| 1414 | 20 | 0.05 | 4.98 |
| 1415 | 60 | 0.15 | 5.13 |
| 1416 | 98 | 0.25 | 5.38 |
| 1417 | 27 | 0.07 | 5.45 |
| 1418 | 35 | 0.09 | 5.54 |
| 1419 | 91 | 0.23 | 5.77 |
| 1420 | 54 | 0.14 | 5.90 |
| 1421 | 22 | 0.06 | 5.96 |
| 1422 | 58 | 0.15 | 6.11 |
| 1423 | 86 | 0.22 | 6.32 |
| 1424 | 24 | 0.06 | 6.38 |
| 1425 | 44 | 0.11 | 6.49 |
| 1426 | 71 | 0.18 | 6.67 |
| 1427 | 26 | 0.07 | 6.74 |
| 1428 | 83 | 0.21 | 6.95 |
| 1429 | 61 | 0.15 | 7.10 |
| 1430 | 50 | 0.13 | 7.23 |
| 1431 | 83 | 0.21 | 7.44 |
| 1432 | 44 | 0.11 | 7.55 |
| 1433 | 53 | 0.13 | 7.68 |
| 1434 | 84 | 0.21 | 7.89 |
| 1435 | 33 | 0.08 | 7.98 |
| 1436 | 49 | 0.12 | 8.10 |
| 1437 | 94 | 0.24 | 8.34 |
| 1438 | 27 | 0.07 | 8.41 |
| 1439 | 61 | 0.15 | 8.56 |
| 1440 | 82 | 0.21 | 8.77 |
| 1441 | 39 | 0.10 | 8.86 |
| 1442 | 76 | 0.19 | 9.06 |
| 1443 | 68 | 0.17 | 9.23 |
| 1444 | 52 | 0.13 | 9.36 |
| 1445 | 94 | 0.24 | 9.60 |
| 1446 | 41 | 0.10 | 9.70 |
| 1447 | 52 | 0.13 | 9.83 |
| 1448 | 81 | 0.20 | 10.03 |
| 1449 | 68 | 0.17 | 10.21 |
| 1450 | 89 | 0.22 | 10.43 |
| 1451 | 63 | 0.16 | 10.59 |
| 1452 | 93 | 0.23 | 10.82 |
| 1453 | 68 | 0.17 | 11.00 |
| 1454 | 44 | 0.11 | 11.11 |
| 1455 | 113 | 0.28 | 11.39 |
| 1456 | 74 | 0.19 | 11.58 |
| 1457 | 73 | 0.18 | 11.76 |
| 1458 | 97 | 0.24 | 12.01 |
| 1459 | 95 | 0.24 | 12.25 |
| 1460 | 82 | 0.21 | 12.45 |
| 1461 | 74 | 0.19 | 12.64 |
| 1462 | 85 | 0.21 | 12.85 |
| 1463 | 86 | 0.22 | 13.07 |
| 1464 | 103 | 0.26 | 13.33 |
| 1465 | 97 | 0.24 | 13.58 |
| 1466 | 115 | 0.29 | 13.87 |
| 1467 | 82 | 0.21 | 14.07 |
| 1468 | 76 | 0.19 | 14.26 |
| 1469 | 102 | 0.26 | 14.52 |
| 1470 | 105 | 0.26 | 14.79 |
| 1471 | 102 | 0.26 | 15.04 |
| 1472 | 108 | 0.27 | 15.32 |
| 1473 | 159 | 0.40 | 15.72 |
| 1474 | 89 | 0.22 | 15.94 |
| 1475 | 83 | 0.21 | 16.15 |
| 1476 | 188 | 0.47 | 16.62 |
| 1477 | 57 | 0.14 | 16.77 |
| 1478 | 177 | 0.45 | 17.21 |
| 1479 | 120 | 0.30 | 17.52 |
| 1480 | 43 | 0.11 | 17.63 |
| 1481 | 302 | 0.76 | 18.39 |
| 1482 | 66 | 0.17 | 18.55 |
| 1483 | 14 | 0.04 | 18.59 |
| 1484 | 290 | 0.73 | 19.32 |
| 1485 | 84 | 0.21 | 19.53 |
| 1486 | 133 | 0.34 | 19.87 |
| 1487 | 178 | 0.45 | 20.32 |
| 1488 | 67 | 0.17 | 20.49 |
| 1489 | 227 | 0.57 | 21.06 |
| 1490 | 98 | 0.25 | 21.31 |
| 1491 | 58 | 0.15 | 21.45 |
| 1492 | 285 | 0.72 | 22.17 |
| 1493 | 67 | 0.17 | 22.34 |
| 1494 | 159 | 0.40 | 22.74 |
| 1495 | 257 | 0.65 | 23.39 |
| 1496 | 68 | 0.17 | 23.56 |
| 1497 | 241 | 0.61 | 24.17 |
| 1498 | 173 | 0.44 | 24.60 |
| 1499 | 75 | 0.19 | 24.79 |
| 1500 | 285 | 0.72 | 25.51 |
| 1501 | 108 | 0.27 | 25.78 |
| 1502 | 141 | 0.36 | 26.14 |
| 1503 | 308 | 0.78 | 26.92 |
| 1504 | 86 | 0.22 | 27.13 |
| 1505 | 85 | 0.21 | 27.35 |
| 1506 | 302 | 0.76 | 28.11 |
| 1507 | 130 | 0.33 | 28.44 |
| 1508 | 87 | 0.22 | 28.66 |
| 1509 | 274 | 0.69 | 29.35 |
| 1510 | 246 | 0.62 | 29.97 |
| 1511 | 84 | 0.21 | 30.18 |
| 1512 | 329 | 0.83 | 31.01 |
| 1513 | 143 | 0.36 | 31.37 |
| 1514 | 139 | 0.35 | 31.72 |
| 1515 | 320 | 0.81 | 32.53 |
| 1516 | 123 | 0.31 | 32.84 |
| 1517 | 142 | 0.36 | 33.20 |
| 1518 | 294 | 0.74 | 33.94 |
| 1519 | 246 | 0.62 | 34.56 |
| 1520 | 78 | 0.20 | 34.75 |
| 1521 | 279 | 0.70 | 35.46 |
| 1522 | 330 | 0.83 | 36.29 |
| 1523 | 89 | 0.22 | 36.52 |
| 1524 | 136 | 0.34 | 36.86 |
| 1525 | 425 | 1.07 | 37.93 |
| 1526 | 109 | 0.27 | 38.20 |
| 1527 | 106 | 0.27 | 38.47 |
| 1528 | 425 | 1.07 | 39.54 |
| 1529 | 116 | 0.29 | 39.84 |
| 1530 | 130 | 0.33 | 40.16 |
| 1531 | 311 | 0.78 | 40.95 |
| 1532 | 375 | 0.95 | 41.89 |
| 1533 | 36 | 0.09 | 41.99 |
| 1534 | 132 | 0.33 | 42.32 |
| 1535 | 473 | 1.19 | 43.51 |
| 1536 | 131 | 0.33 | 43.84 |
| 1537 | 118 | 0.30 | 44.14 |
| 1538 | 396 | 1.00 | 45.14 |
| 1539 | 179 | 0.45 | 45.59 |
| 1540 | 130 | 0.33 | 45.92 |
| 1541 | 251 | 0.63 | 46.55 |
| 1542 | 327 | 0.82 | 47.37 |
| 1543 | 226 | 0.57 | 47.94 |
| 1544 | 146 | 0.37 | 48.31 |
| 1545 | 178 | 0.45 | 48.76 |
| 1546 | 304 | 0.77 | 49.53 |
| 1547 | 299 | 0.75 | 50.28 |
| 1548 | 210 | 0.53 | 50.81 |
| 1549 | 103 | 0.26 | 51.07 |
| 1550 | 465 | 1.17 | 52.24 |
| 1551 | 203 | 0.51 | 52.76 |
| 1552 | 146 | 0.37 | 53.12 |
| 1553 | 241 | 0.61 | 53.73 |
| 1554 | 245 | 0.62 | 54.35 |
| 1555 | 188 | 0.47 | 54.82 |
| 1556 | 236 | 0.60 | 55.42 |
| 1557 | 189 | 0.48 | 55.90 |
| 1558 | 207 | 0.52 | 56.42 |
| 1559 | 456 | 1.15 | 57.57 |
| 1560 | 167 | 0.42 | 57.99 |
| 1561 | 58 | 0.15 | 58.14 |
| 1562 | 166 | 0.42 | 58.55 |
| 1563 | 440 | 1.11 | 59.66 |
| 1564 | 263 | 0.66 | 60.33 |
| 1565 | 26 | 0.07 | 60.39 |
| 1566 | 327 | 0.82 | 61.22 |
| 1567 | 305 | 0.77 | 61.99 |
| 1568 | 191 | 0.48 | 62.47 |
| 1569 | 186 | 0.47 | 62.94 |
| 1570 | 364 | 0.92 | 63.86 |
| 1571 | 13 | 0.03 | 63.89 |
| 1572 | 112 | 0.28 | 64.17 |
| 1573 | 561 | 1.41 | 65.59 |
| 1574 | 221 | 0.56 | 66.14 |
| 1576 | 86 | 0.22 | 66.36 |
| 1577 | 555 | 1.40 | 67.76 |
| 1578 | 218 | 0.55 | 68.31 |
| 1579 | 31 | 0.08 | 68.39 |
| 1580 | 272 | 0.69 | 69.07 |
| 1581 | 206 | 0.52 | 69.59 |
| 1582 | 35 | 0.09 | 69.68 |
| 1583 | 429 | 1.08 | 70.76 |
| 1584 | 236 | 0.60 | 71.36 |
| 1585 | 254 | 0.64 | 72.00 |
| 1586 | 138 | 0.35 | 72.35 |
| 1587 | 27 | 0.07 | 72.42 |
| 1588 | 507 | 1.28 | 73.69 |
| 1589 | 48 | 0.12 | 73.81 |
| 1590 | 314 | 0.79 | 74.61 |
| 1591 | 25 | 0.06 | 74.67 |
| 1592 | 55 | 0.14 | 74.81 |
| 1593 | 210 | 0.53 | 75.34 |
| 1594 | 365 | 0.92 | 76.26 |
| 1595 | 222 | 0.56 | 76.82 |
| 1596 | 45 | 0.11 | 76.93 |
| 1597 | 198 | 0.50 | 77.43 |
| 1598 | 345 | 0.87 | 78.30 |
| 1599 | 20 | 0.05 | 78.35 |
| 1600 | 75 | 0.19 | 78.54 |
| 1601 | 226 | 0.57 | 79.11 |
| 1602 | 338 | 0.85 | 79.96 |
| 1603 | 213 | 0.54 | 80.50 |
| 1604 | 38 | 0.10 | 80.60 |
| 1605 | 2 | 0.01 | 80.60 |
| 1606 | 158 | 0.40 | 81.00 |
| 1607 | 387 | 0.98 | 81.98 |
| 1608 | 221 | 0.56 | 82.53 |
| 1609 | 33 | 0.08 | 82.62 |
| 1610 | 177 | 0.45 | 83.06 |
| 1611 | 54 | 0.14 | 83.20 |
| 1612 | 205 | 0.52 | 83.72 |
| 1613 | 9 | 0.02 | 83.74 |
| 1614 | 546 | 1.38 | 85.12 |
| 1615 | 4 | 0.01 | 85.13 |
| 1616 | 4 | 0.01 | 85.14 |
| 1618 | 304 | 0.77 | 85.90 |
| 1619 | 198 | 0.50 | 86.40 |
| 1620 | 2 | 0.01 | 86.41 |
| 1621 | 160 | 0.40 | 86.81 |
| 1622 | 100 | 0.25 | 87.06 |
| 1624 | 393 | 0.99 | 88.05 |
| 1625 | 8 | 0.02 | 88.07 |
| 1626 | 115 | 0.29 | 88.36 |
| 1627 | 12 | 0.03 | 88.39 |
| 1628 | 1 | 0.00 | 88.40 |
| 1629 | 74 | 0.19 | 88.58 |
| 1630 | 389 | 0.98 | 89.56 |
| 1631 | 175 | 0.44 | 90.01 |
| 1633 | 19 | 0.05 | 90.05 |
| 1635 | 153 | 0.39 | 90.44 |
| 1636 | 209 | 0.53 | 90.97 |
| 1637 | 1 | 0.00 | 90.97 |
| 1638 | 148 | 0.37 | 91.34 |
| 1640 | 198 | 0.50 | 91.84 |
| 1641 | 1 | 0.00 | 91.84 |
| 1643 | 224 | 0.56 | 92.41 |
| 1646 | 148 | 0.37 | 92.78 |
| 1647 | 62 | 0.16 | 92.94 |
| 1648 | 51 | 0.13 | 93.07 |
| 1650 | 116 | 0.29 | 93.36 |
| 1651 | 89 | 0.22 | 93.58 |
| 1652 | 154 | 0.39 | 93.97 |
| 1656 | 99 | 0.25 | 94.22 |
| 1659 | 135 | 0.34 | 94.56 |
| 1660 | 202 | 0.51 | 95.07 |
| 1665 | 1 | 0.00 | 95.07 |
| 1666 | 213 | 0.54 | 95.61 |
| 1667 | 10 | 0.03 | 95.64 |
| 1668 | 1 | 0.00 | 95.64 |
| 1670 | 2 | 0.01 | 95.64 |
| 1671 | 124 | 0.31 | 95.96 |
| 1672 | 39 | 0.10 | 96.06 |
| 1673 | 2 | 0.01 | 96.06 |
| 1675 | 1 | 0.00 | 96.06 |
| 1676 | 93 | 0.23 | 96.30 |
| 1677 | 131 | 0.33 | 96.63 |
| 1679 | 10 | 0.03 | 96.65 |
| 1680 | 2 | 0.01 | 96.66 |
| 1683 | 3 | 0.01 | 96.67 |
| 1684 | 94 | 0.24 | 96.90 |
| 1686 | 14 | 0.04 | 96.94 |
| 1687 | 3 | 0.01 | 96.95 |
| 1688 | 70 | 0.18 | 97.12 |
| 1689 | 14 | 0.04 | 97.16 |
| 1692 | 83 | 0.21 | 97.37 |
| 1693 | 17 | 0.04 | 97.41 |
| 1695 | 4 | 0.01 | 97.42 |
| 1697 | 23 | 0.06 | 97.48 |
| 1701 | 103 | 0.26 | 97.74 |
| 1704 | 30 | 0.08 | 97.81 |
| 1705 | 46 | 0.12 | 97.93 |
| 1710 | 56 | 0.14 | 98.07 |
| 1713 | 34 | 0.09 | 98.16 |
| 1715 | 76 | 0.19 | 98.35 |
| 1716 | 6 | 0.02 | 98.36 |
| 1721 | 68 | 0.17 | 98.53 |
| 1727 | 76 | 0.19 | 98.73 |
| 1730 | 29 | 0.07 | 98.80 |
| 1732 | 16 | 0.04 | 98.84 |
| 1734 | 54 | 0.14 | 98.98 |
| 1737 | 1 | 0.00 | 98.98 |
| 1740 | 3 | 0.01 | 98.99 |
| 1741 | 59 | 0.15 | 99.13 |
| 1743 | 1 | 0.00 | 99.14 |
| 1748 | 4 | 0.01 | 99.15 |
| 1751 | 46 | 0.12 | 99.26 |
| 1753 | 3 | 0.01 | 99.27 |
| 1758 | 13 | 0.03 | 99.30 |
| 1761 | 9 | 0.02 | 99.33 |
| 1763 | 29 | 0.07 | 99.40 |
| 1765 | 11 | 0.03 | 99.43 |
| 1769 | 9 | 0.02 | 99.45 |
| 1774 | 7 | 0.02 | 99.47 |
| 1779 | 38 | 0.10 | 99.56 |
| 1783 | 1 | 0.00 | 99.57 |
| 1785 | 17 | 0.04 | 99.61 |
| 1791 | 22 | 0.06 | 99.66 |
| 1795 | 5 | 0.01 | 99.68 |
| 1798 | 24 | 0.06 | 99.74 |
| 1805 | 24 | 0.06 | 99.80 |
| 1807 | 13 | 0.03 | 99.83 |
| 1811 | 3 | 0.01 | 99.84 |
| 1815 | 24 | 0.06 | 99.90 |
| 1827 | 16 | 0.04 | 99.94 |
| 1837 | 2 | 0.01 | 99.94 |
| 1843 | 7 | 0.02 | 99.96 |
| 1871 | 3 | 0.01 | 99.97 |
| 1886 | 5 | 0.01 | 99.98 |
| 1950 | 7 | 0.02 | 100.00 |

### Appendix 7.D: Means and Standard Deviations of Scale Scores by Demographic Student Group

**Note:** In table 7.D.1 through table 7.D.13, to protect privacy, when the number of students in a student group is 10 or fewer, the summary statistics of scale scores and proficiency levels are not reported, but are replaced by “N/A.”

Table 7.D.1 Mean and Standard Deviation of Overall, Written Language, and Oral Language Scale Scores by Student Group, Kindergarten

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Student Group** | **Number of Students Tested** | **Overall Scale Score Mean** | **Overall Scale Score SD** | **Oral Language Scale Score Mean** | **Oral Language Scale Score SD** | **Written Language Scale Score Mean** | **Written Language Scale Score SD** |
| All | 137,724 | 1417 | 79 | 1422 | 77 | 1405 | 114 |
| Male | 71,407 | 1412 | 82 | 1416 | 80 | 1401 | 115 |
| Female | 66,306 | 1422 | 77 | 1428 | 74 | 1409 | 113 |
| Nonbinary | 11 | 1390 | 71 | 1394 | 62 | 1380 | 114 |
| American Indian or Alaska Native | 258 | 1417 | 76 | 1425 | 77 | 1398 | 100 |
| Asian | 19,899 | 1442 | 86 | 1438 | 79 | 1451 | 134 |
| Native Hawaiian or Other Pacific Islander | 321 | 1423 | 58 | 1429 | 48 | 1411 | 108 |
| Filipino | 878 | 1442 | 85 | 1437 | 78 | 1454 | 135 |
| Hispanic or Latino | 105,274 | 1411 | 76 | 1418 | 75 | 1394 | 106 |
| Black or African American | 705 | 1424 | 82 | 1427 | 80 | 1416 | 118 |
| White | 7,907 | 1422 | 88 | 1425 | 86 | 1416 | 123 |
| Two or more races | 2,482 | 1423 | 94 | 1426 | 90 | 1418 | 132 |
| No reported disabilities | 123,196 | 1422 | 77 | 1427 | 74 | 1410 | 114 |
| Reported disabilities | 14,528 | 1372 | 88 | 1378 | 91 | 1360 | 102 |
| Not economically disadvantaged | 28,690 | 1430 | 92 | 1431 | 89 | 1427 | 132 |
| Economically disadvantaged | 109,034 | 1413 | 75 | 1419 | 73 | 1399 | 108 |
| In US schools less than 12 months | 109,118 | 1406 | 76 | 1413 | 76 | 1391 | 104 |
| In US schools 12 months or more | 26,726 | 1460 | 77 | 1458 | 69 | 1465 | 131 |
| Duration unknown | 1,880 | 1383 | 86 | 1392 | 90 | 1363 | 101 |
| Migrant education | 2,616 | 1392 | 77 | 1397 | 80 | 1379 | 95 |
| Not migrant education | 135,108 | 1417 | 79 | 1422 | 77 | 1405 | 114 |
| Armed forces family member | 952 | 1433 | 75 | 1438 | 70 | 1420 | 118 |
| Not armed forces family member | 136,772 | 1416 | 79 | 1421 | 77 | 1405 | 114 |
| Homeless | 7,343 | 1388 | 80 | 1395 | 84 | 1372 | 98 |
| Not homeless | 130,381 | 1418 | 79 | 1423 | 76 | 1407 | 115 |
| Foster youth | 450 | 1409 | 77 | 1418 | 77 | 1385 | 107 |
| Not foster youth | 137,274 | 1417 | 79 | 1422 | 77 | 1405 | 114 |
| American Indian or Alaska Native—Not economically disadvantaged | 79 | 1425 | 84 | 1430 | 86 | 1414 | 107 |
| American Indian or Alaska Native—Economically disadvantaged | 179 | 1413 | 73 | 1423 | 73 | 1391 | 96 |
| Asian—Not economically disadvantaged | 9,694 | 1456 | 89 | 1449 | 82 | 1472 | 140 |
| Asian—Economically disadvantaged | 10,205 | 1429 | 81 | 1428 | 75 | 1432 | 125 |
| Native Hawaiian or Other Pacific Islander—Not economically disadvantaged | 77 | 1439 | 60 | 1439 | 44 | 1439 | 118 |
| Native Hawaiian or Other Pacific Islander—Economically disadvantaged | 244 | 1419 | 57 | 1425 | 49 | 1402 | 103 |
| Filipino—Not economically disadvantaged | 437 | 1447 | 85 | 1441 | 78 | 1461 | 137 |
| Filipino—Economically disadvantaged | 441 | 1437 | 85 | 1432 | 79 | 1447 | 133 |
| Hispanic or Latino—Not economically disadvantaged | 14,383 | 1409 | 88 | 1416 | 89 | 1393 | 114 |
| Hispanic or Latino—Economically disadvantaged | 90,891 | 1411 | 74 | 1418 | 73 | 1395 | 105 |
| Black or African American—Not economically disadvantaged | 173 | 1431 | 86 | 1432 | 86 | 1428 | 119 |
| Black or African American—Economically disadvantaged | 532 | 1422 | 81 | 1426 | 79 | 1412 | 117 |
| White—Not economically disadvantaged | 2,897 | 1438 | 97 | 1440 | 95 | 1434 | 135 |
| White—Economically disadvantaged | 5,010 | 1413 | 81 | 1416 | 80 | 1405 | 114 |
| Two or more races—Not economically disadvantaged | 950 | 1439 | 107 | 1437 | 104 | 1444 | 148 |
| Two or more races—Economically disadvantaged | 1,532 | 1414 | 84 | 1419 | 80 | 1401 | 118 |

Table 7.D.2 Mean and Standard Deviation of Overall, Written Language, and Oral Language Scale Scores by Student Group, Grade One

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Student Group** | **Number of Students Tested** | **Overall Scale Score Mean** | **Overall Scale Score SD** | **Oral Language Scale Score Mean** | **Oral Language Scale Score SD** | **Written Language Scale Score Mean** | **Written Language Scale Score SD** |
| All | 99,947 | 1438 | 62 | 1449 | 66 | 1426 | 73 |
| Male | 52,419 | 1435 | 65 | 1447 | 69 | 1423 | 75 |
| Female | 47,513 | 1441 | 60 | 1452 | 63 | 1429 | 71 |
| Nonbinary | 15 | 1437 | 106 | 1447 | 89 | 1426 | 140 |
| American Indian or Alaska Native | 175 | 1445 | 60 | 1458 | 58 | 1432 | 76 |
| Asian | 12,574 | 1464 | 68 | 1462 | 69 | 1465 | 82 |
| Native Hawaiian or Other Pacific Islander | 243 | 1432 | 64 | 1441 | 57 | 1424 | 81 |
| Filipino | 607 | 1463 | 67 | 1459 | 64 | 1466 | 84 |
| Hispanic or Latino | 78,767 | 1433 | 59 | 1447 | 64 | 1419 | 68 |
| Black or African American | 510 | 1445 | 73 | 1450 | 75 | 1438 | 86 |
| White | 5,566 | 1441 | 74 | 1446 | 80 | 1436 | 82 |
| Two or more races | 1,505 | 1437 | 77 | 1445 | 81 | 1429 | 86 |
| No reported disabilities | 87,967 | 1442 | 60 | 1453 | 64 | 1430 | 71 |
| Reported disabilities | 11,980 | 1408 | 68 | 1423 | 75 | 1393 | 77 |
| Not economically disadvantaged | 16,990 | 1447 | 79 | 1452 | 84 | 1442 | 89 |
| Economically disadvantaged | 82,957 | 1436 | 58 | 1449 | 62 | 1423 | 69 |
| In US schools less than 12 months | 8,603 | 1375 | 93 | 1374 | 106 | 1375 | 96 |
| In US schools 12 months or more | 90,711 | 1444 | 55 | 1457 | 56 | 1431 | 68 |
| Duration unknown | 633 | 1395 | 93 | 1404 | 108 | 1385 | 94 |
| Migrant education | 2,371 | 1421 | 60 | 1432 | 68 | 1410 | 65 |
| Not migrant education | 97,576 | 1438 | 62 | 1450 | 66 | 1426 | 73 |
| Armed forces family member | 928 | 1446 | 53 | 1458 | 54 | 1433 | 67 |
| Not armed forces family member | 99,019 | 1438 | 62 | 1449 | 66 | 1426 | 73 |
| Homeless | 5,819 | 1414 | 69 | 1425 | 80 | 1402 | 74 |
| Not homeless | 94,128 | 1439 | 62 | 1451 | 65 | 1427 | 73 |
| Foster youth | 305 | 1432 | 53 | 1452 | 55 | 1411 | 60 |
| Not foster youth | 99,642 | 1438 | 62 | 1449 | 66 | 1426 | 73 |
| American Indian or Alaska Native—Not economically disadvantaged | 30 | 1461 | 89 | 1463 | 82 | 1459 | 111 |
| American Indian or Alaska Native—Economically disadvantaged | 145 | 1442 | 52 | 1457 | 51 | 1426 | 65 |
| Asian—Not economically disadvantaged | 5,267 | 1476 | 72 | 1471 | 75 | 1480 | 86 |
| Asian—Economically disadvantaged | 7,307 | 1456 | 63 | 1457 | 63 | 1455 | 78 |
| Native Hawaiian or Other Pacific Islander—Not economically disadvantaged | 49 | 1442 | 69 | 1444 | 60 | 1438 | 85 |
| Native Hawaiian or Other Pacific Islander—Economically disadvantaged | 194 | 1430 | 63 | 1440 | 57 | 1420 | 80 |
| Filipino—Not economically disadvantaged | 260 | 1467 | 73 | 1460 | 67 | 1473 | 94 |
| Filipino—Economically disadvantaged | 347 | 1460 | 62 | 1458 | 62 | 1461 | 76 |
| Hispanic or Latino—Not economically disadvantaged | 8,964 | 1429 | 76 | 1441 | 86 | 1417 | 81 |
| Hispanic or Latino—Economically disadvantaged | 69,803 | 1434 | 56 | 1448 | 61 | 1419 | 66 |
| Black or African American—Not economically disadvantaged | 105 | 1461 | 82 | 1461 | 74 | 1460 | 105 |
| Black or African American—Economically disadvantaged | 405 | 1440 | 70 | 1447 | 75 | 1433 | 79 |
| White—Not economically disadvantaged | 1,829 | 1452 | 83 | 1455 | 90 | 1447 | 92 |
| White—Economically disadvantaged | 3,737 | 1436 | 68 | 1442 | 74 | 1431 | 76 |
| Two or more races—Not economically disadvantaged | 486 | 1444 | 97 | 1450 | 105 | 1437 | 102 |
| Two or more races—Economically disadvantaged | 1,019 | 1434 | 65 | 1443 | 67 | 1425 | 77 |

Table 7.D.3 Mean and Standard Deviation of Overall, Written Language, and Oral Language Scale Scores by Student Group, Grade Two

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Student Group** | **Number of Students Tested** | **Overall Scale Score Mean** | **Overall Scale Score SD** | **Oral Language Scale Score Mean** | **Oral Language Scale Score SD** | **Written Language Scale Score Mean** | **Written Language Scale Score SD** |
| All | 95,667 | 1470 | 56 | 1475 | 61 | 1465 | 65 |
| Male | 50,768 | 1469 | 58 | 1474 | 64 | 1462 | 66 |
| Female | 44,888 | 1472 | 54 | 1477 | 59 | 1467 | 64 |
| Nonbinary | 11 | 1448 | 59 | 1443 | 64 | 1454 | 60 |
| American Indian or Alaska Native | 148 | 1462 | 60 | 1464 | 67 | 1459 | 65 |
| Asian | 11,099 | 1490 | 62 | 1485 | 67 | 1495 | 70 |
| Native Hawaiian or Other Pacific Islander | 239 | 1467 | 55 | 1468 | 54 | 1466 | 68 |
| Filipino | 639 | 1490 | 50 | 1483 | 52 | 1497 | 61 |
| Hispanic or Latino | 76,862 | 1467 | 54 | 1474 | 59 | 1460 | 63 |
| Black or African American | 435 | 1478 | 55 | 1482 | 56 | 1474 | 67 |
| White | 5,046 | 1473 | 67 | 1473 | 75 | 1472 | 71 |
| Two or more races | 1,199 | 1467 | 66 | 1470 | 75 | 1465 | 70 |
| No reported disabilities | 83,992 | 1474 | 55 | 1479 | 61 | 1469 | 63 |
| Reported disabilities | 11,675 | 1442 | 57 | 1451 | 61 | 1433 | 69 |
| Not economically disadvantaged | 14,334 | 1478 | 69 | 1477 | 78 | 1478 | 74 |
| Economically disadvantaged | 81,333 | 1469 | 54 | 1475 | 58 | 1462 | 63 |
| In US schools less than 12 months | 5,270 | 1398 | 83 | 1386 | 96 | 1410 | 85 |
| In US schools 12 months or more | 89,933 | 1475 | 51 | 1481 | 54 | 1468 | 62 |
| Duration unknown | 464 | 1440 | 76 | 1442 | 85 | 1437 | 82 |
| Migrant education | 2,534 | 1453 | 56 | 1459 | 63 | 1445 | 62 |
| Not migrant education | 93,133 | 1471 | 56 | 1476 | 61 | 1465 | 65 |
| Armed forces family member | 1,014 | 1477 | 50 | 1484 | 54 | 1469 | 62 |
| Not armed forces family member | 94,653 | 1470 | 57 | 1475 | 62 | 1465 | 65 |
| Homeless | 5,605 | 1449 | 64 | 1454 | 74 | 1443 | 69 |
| Not homeless | 90,062 | 1472 | 56 | 1477 | 60 | 1466 | 65 |
| Foster youth | 265 | 1465 | 50 | 1478 | 53 | 1451 | 60 |
| Not foster youth | 95,402 | 1470 | 57 | 1475 | 62 | 1465 | 65 |
| American Indian or Alaska Native—Not economically disadvantaged | 27 | 1487 | 47 | 1481 | 56 | 1493 | 56 |
| American Indian or Alaska Native—Economically disadvantaged | 121 | 1456 | 61 | 1460 | 69 | 1451 | 65 |
| Asian—Not economically disadvantaged | 4,398 | 1496 | 66 | 1489 | 73 | 1504 | 71 |
| Asian—Economically disadvantaged | 6,701 | 1486 | 59 | 1483 | 62 | 1489 | 69 |
| Native Hawaiian or Other Pacific Islander—Not economically disadvantaged | 50 | 1488 | 49 | 1486 | 41 | 1488 | 67 |
| Native Hawaiian or Other Pacific Islander—Economically disadvantaged | 189 | 1462 | 56 | 1464 | 56 | 1460 | 67 |
| Filipino—Not economically disadvantaged | 286 | 1486 | 55 | 1481 | 59 | 1491 | 64 |
| Filipino—Economically disadvantaged | 353 | 1494 | 45 | 1485 | 45 | 1503 | 57 |
| Hispanic or Latino—Not economically disadvantaged | 7,668 | 1465 | 68 | 1468 | 79 | 1461 | 70 |
| Hispanic or Latino—Economically disadvantaged | 69,194 | 1467 | 52 | 1475 | 57 | 1459 | 62 |
| Black or African American—Not economically disadvantaged | 98 | 1487 | 53 | 1491 | 61 | 1483 | 60 |
| Black or African American—Economically disadvantaged | 337 | 1476 | 55 | 1480 | 55 | 1471 | 69 |
| White—Not economically disadvantaged | 1,449 | 1489 | 73 | 1489 | 84 | 1489 | 76 |
| White—Economically disadvantaged | 3,597 | 1466 | 63 | 1467 | 70 | 1465 | 68 |
| Two or more races—Not economically disadvantaged | 358 | 1476 | 80 | 1476 | 91 | 1476 | 81 |
| Two or more races—Economically disadvantaged | 841 | 1463 | 59 | 1467 | 66 | 1459 | 65 |

Table 7.D.4 Mean and Standard Deviation of Overall, Written Language, and Oral Language Scale Scores by Student Group, Grade Three

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Student Group** | **Number of Students Tested** | **Overall Scale Score Mean** | **Overall Scale Score SD** | **Oral Language Scale Score Mean** | **Oral Language Scale Score SD** | **Written Language Scale Score Mean** | **Written Language Scale Score SD** |
| All | 97,908 | 1485 | 46 | 1488 | 59 | 1482 | 43 |
| Male | 51,853 | 1484 | 47 | 1488 | 61 | 1480 | 44 |
| Female | 46,049 | 1487 | 45 | 1488 | 57 | 1485 | 42 |
| Nonbinary | 6 | N/A | N/A | N/A | N/A | N/A | N/A |
| American Indian or Alaska Native | 131 | 1485 | 49 | 1488 | 60 | 1481 | 46 |
| Asian | 10,486 | 1499 | 52 | 1498 | 66 | 1500 | 48 |
| Native Hawaiian or Other Pacific Islander | 265 | 1477 | 44 | 1476 | 60 | 1478 | 40 |
| Filipino | 734 | 1504 | 45 | 1501 | 55 | 1508 | 45 |
| Hispanic or Latino | 79,527 | 1483 | 44 | 1487 | 57 | 1479 | 42 |
| Black or African American | 428 | 1492 | 47 | 1496 | 61 | 1487 | 45 |
| White | 5,044 | 1487 | 55 | 1488 | 71 | 1486 | 48 |
| Two or more races | 1,293 | 1483 | 54 | 1484 | 68 | 1482 | 49 |
| No reported disabilities | 85,080 | 1489 | 46 | 1491 | 59 | 1485 | 43 |
| Reported disabilities | 12,828 | 1463 | 41 | 1465 | 54 | 1460 | 39 |
| Not economically disadvantaged | 14,214 | 1492 | 55 | 1492 | 71 | 1491 | 48 |
| Economically disadvantaged | 83,694 | 1484 | 44 | 1487 | 57 | 1481 | 42 |
| In US schools less than 12 months | 4,862 | 1425 | 55 | 1402 | 75 | 1448 | 43 |
| In US schools 12 months or more | 92,584 | 1489 | 43 | 1493 | 54 | 1484 | 43 |
| Duration unknown | 462 | 1464 | 53 | 1458 | 72 | 1469 | 44 |
| Migrant education | 2,649 | 1473 | 46 | 1473 | 60 | 1473 | 41 |
| Not migrant education | 95,259 | 1486 | 46 | 1488 | 59 | 1482 | 43 |
| Armed forces family member | 1,049 | 1492 | 43 | 1497 | 54 | 1487 | 44 |
| Not armed forces family member | 96,859 | 1485 | 46 | 1488 | 59 | 1482 | 43 |
| Homeless | 6,199 | 1470 | 49 | 1470 | 66 | 1470 | 42 |
| Not homeless | 91,709 | 1486 | 46 | 1489 | 58 | 1483 | 43 |
| Foster youth | 252 | 1472 | 44 | 1479 | 55 | 1465 | 41 |
| Not foster youth | 97,656 | 1485 | 46 | 1488 | 59 | 1482 | 43 |
| American Indian or Alaska Native—Not economically disadvantaged | 27 | 1471 | 52 | 1473 | 67 | 1468 | 46 |
| American Indian or Alaska Native—Economically disadvantaged | 104 | 1488 | 48 | 1492 | 57 | 1484 | 45 |
| Asian—Not economically disadvantaged | 3,963 | 1505 | 55 | 1504 | 72 | 1506 | 49 |
| Asian—Economically disadvantaged | 6,523 | 1495 | 50 | 1494 | 63 | 1496 | 47 |
| Native Hawaiian or Other Pacific Islander—Not economically disadvantaged | 49 | 1491 | 43 | 1494 | 66 | 1487 | 35 |
| Native Hawaiian or Other Pacific Islander—Economically disadvantaged | 216 | 1474 | 44 | 1472 | 58 | 1476 | 41 |
| Filipino—Not economically disadvantaged | 319 | 1504 | 44 | 1500 | 54 | 1508 | 45 |
| Filipino—Economically disadvantaged | 415 | 1505 | 46 | 1501 | 55 | 1507 | 46 |
| Hispanic or Latino—Not economically disadvantaged | 7,989 | 1483 | 52 | 1484 | 69 | 1481 | 45 |
| Hispanic or Latino—Economically disadvantaged | 71,538 | 1483 | 43 | 1487 | 55 | 1479 | 41 |
| Black or African American—Not economically disadvantaged | 85 | 1502 | 51 | 1508 | 66 | 1497 | 47 |
| Black or African American—Economically disadvantaged | 343 | 1489 | 46 | 1494 | 60 | 1485 | 44 |
| White—Not economically disadvantaged | 1,416 | 1500 | 59 | 1503 | 79 | 1497 | 50 |
| White—Economically disadvantaged | 3,628 | 1482 | 52 | 1482 | 67 | 1482 | 47 |
| Two or more races—Not economically disadvantaged | 366 | 1490 | 64 | 1489 | 81 | 1491 | 57 |
| Two or more races—Economically disadvantaged | 927 | 1481 | 50 | 1482 | 63 | 1479 | 46 |

Table 7.D.5 Mean and Standard Deviation of Overall, Written Language, and Oral Language Scale Scores by Student Group, Grade Four

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Student Group** | **Number of Students Tested** | **Overall Scale Score Mean** | **Overall Scale Score SD** | **Oral Language Scale Score Mean** | **Oral Language Scale Score SD** | **Written Language Scale Score Mean** | **Written Language Scale Score SD** |
| All | 94,239 | 1507 | 52 | 1510 | 66 | 1505 | 49 |
| Male | 49,941 | 1506 | 53 | 1510 | 68 | 1502 | 50 |
| Female | 44,293 | 1509 | 51 | 1509 | 64 | 1508 | 48 |
| Nonbinary | 5 | N/A | N/A | N/A | N/A | N/A | N/A |
| American Indian or Alaska Native | 141 | 1510 | 51 | 1518 | 66 | 1501 | 48 |
| Asian | 9,583 | 1520 | 60 | 1519 | 76 | 1521 | 55 |
| Native Hawaiian or Other Pacific Islander | 259 | 1503 | 55 | 1504 | 70 | 1502 | 50 |
| Filipino | 804 | 1522 | 45 | 1517 | 56 | 1527 | 46 |
| Hispanic or Latino | 77,352 | 1506 | 50 | 1508 | 64 | 1502 | 48 |
| Black or African American | 419 | 1510 | 54 | 1514 | 67 | 1506 | 51 |
| White | 4,565 | 1507 | 62 | 1508 | 79 | 1505 | 54 |
| Two or more races | 1,116 | 1505 | 63 | 1507 | 80 | 1504 | 55 |
| No reported disabilities | 80,386 | 1512 | 52 | 1513 | 67 | 1510 | 48 |
| Reported disabilities | 13,853 | 1482 | 45 | 1487 | 57 | 1475 | 44 |
| Not economically disadvantaged | 12,858 | 1511 | 63 | 1511 | 82 | 1511 | 54 |
| Economically disadvantaged | 81,381 | 1507 | 50 | 1509 | 63 | 1504 | 48 |
| In US schools less than 12 months | 4,541 | 1430 | 59 | 1405 | 80 | 1455 | 45 |
| In US schools 12 months or more | 89,297 | 1511 | 48 | 1515 | 60 | 1507 | 48 |
| Duration unknown | 401 | 1480 | 65 | 1474 | 91 | 1486 | 50 |
| Migrant education | 2,404 | 1496 | 53 | 1496 | 69 | 1497 | 48 |
| Not migrant education | 91,835 | 1508 | 52 | 1510 | 66 | 1505 | 49 |
| Armed forces family member | 1,025 | 1516 | 47 | 1521 | 61 | 1511 | 47 |
| Not armed forces family member | 93,214 | 1507 | 52 | 1509 | 66 | 1505 | 49 |
| Homeless | 6,165 | 1491 | 58 | 1491 | 76 | 1491 | 50 |
| Not homeless | 88,074 | 1508 | 51 | 1511 | 65 | 1506 | 49 |
| Foster youth | 254 | 1499 | 49 | 1505 | 55 | 1493 | 53 |
| Not foster youth | 93,985 | 1507 | 52 | 1510 | 66 | 1505 | 49 |
| American Indian or Alaska Native—Not economically disadvantaged | 28 | 1510 | 54 | 1508 | 70 | 1511 | 49 |
| American Indian or Alaska Native—Economically disadvantaged | 113 | 1510 | 50 | 1521 | 65 | 1499 | 48 |
| Asian—Not economically disadvantaged | 3,330 | 1525 | 64 | 1523 | 83 | 1526 | 56 |
| Asian—Economically disadvantaged | 6,253 | 1518 | 58 | 1517 | 72 | 1518 | 54 |
| Native Hawaiian or Other Pacific Islander—Not economically disadvantaged | 53 | 1519 | 57 | 1521 | 76 | 1517 | 50 |
| Native Hawaiian or Other Pacific Islander—Economically disadvantaged | 206 | 1499 | 54 | 1499 | 68 | 1498 | 49 |
| Filipino—Not economically disadvantaged | 334 | 1523 | 44 | 1517 | 53 | 1528 | 48 |
| Filipino—Economically disadvantaged | 470 | 1522 | 46 | 1517 | 59 | 1526 | 44 |
| Hispanic or Latino—Not economically disadvantaged | 7,559 | 1503 | 60 | 1503 | 80 | 1502 | 51 |
| Hispanic or Latino—Economically disadvantaged | 69,793 | 1506 | 49 | 1509 | 61 | 1502 | 47 |
| Black or African American—Not economically disadvantaged | 86 | 1509 | 61 | 1513 | 77 | 1505 | 59 |
| Black or African American—Economically disadvantaged | 333 | 1510 | 52 | 1514 | 64 | 1506 | 49 |
| White—Not economically disadvantaged | 1,151 | 1518 | 69 | 1520 | 91 | 1515 | 58 |
| White—Economically disadvantaged | 3,414 | 1503 | 59 | 1504 | 75 | 1502 | 52 |
| Two or more races—Not economically disadvantaged | 317 | 1513 | 76 | 1511 | 101 | 1513 | 60 |
| Two or more races—Economically disadvantaged | 799 | 1503 | 57 | 1505 | 70 | 1500 | 53 |

Table 7.D.6 Mean and Standard Deviation of Overall, Written Language, and Oral Language Scale Scores by Student Group, Grade Five

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Student Group** | **Number of Students Tested** | **Overall Scale Score Mean** | **Overall Scale Score SD** | **Oral Language Scale Score Mean** | **Oral Language Scale Score SD** | **Written Language Scale Score Mean** | **Written Language Scale Score SD** |
| All | 89,376 | 1526 | 57 | 1527 | 73 | 1524 | 53 |
| Male | 47,026 | 1523 | 59 | 1526 | 75 | 1519 | 54 |
| Female | 42,340 | 1528 | 56 | 1527 | 71 | 1529 | 52 |
| Nonbinary | 10 | N/A | N/A | N/A | N/A | N/A | N/A |
| American Indian or Alaska Native | 120 | 1516 | 50 | 1516 | 56 | 1516 | 53 |
| Asian | 7,995 | 1537 | 67 | 1536 | 86 | 1537 | 60 |
| Native Hawaiian or Other Pacific Islander | 271 | 1518 | 60 | 1518 | 78 | 1516 | 52 |
| Filipino | 773 | 1537 | 50 | 1533 | 63 | 1541 | 49 |
| Hispanic or Latino | 74,658 | 1525 | 55 | 1526 | 70 | 1522 | 52 |
| Black or African American | 401 | 1525 | 62 | 1525 | 76 | 1523 | 58 |
| White | 4,111 | 1523 | 68 | 1523 | 86 | 1522 | 59 |
| Two or more races | 1,047 | 1522 | 68 | 1522 | 88 | 1521 | 59 |
| No reported disabilities | 75,125 | 1531 | 57 | 1531 | 74 | 1530 | 52 |
| Reported disabilities | 14,251 | 1499 | 48 | 1505 | 61 | 1492 | 47 |
| Not economically disadvantaged | 11,590 | 1527 | 68 | 1526 | 88 | 1528 | 59 |
| Economically disadvantaged | 77,786 | 1525 | 55 | 1527 | 70 | 1523 | 52 |
| In US schools less than 12 months | 4,369 | 1437 | 64 | 1411 | 84 | 1462 | 50 |
| In US schools 12 months or more | 84,651 | 1530 | 53 | 1533 | 67 | 1527 | 52 |
| Duration unknown | 356 | 1496 | 70 | 1491 | 94 | 1500 | 56 |
| Migrant education | 2,455 | 1512 | 60 | 1509 | 76 | 1514 | 54 |
| Not migrant education | 86,921 | 1526 | 57 | 1527 | 73 | 1524 | 53 |
| Armed forces family member | 1,054 | 1538 | 51 | 1542 | 67 | 1533 | 49 |
| Not armed forces family member | 88,322 | 1525 | 57 | 1527 | 73 | 1524 | 53 |
| Homeless | 5,962 | 1508 | 66 | 1505 | 85 | 1509 | 57 |
| Not homeless | 83,414 | 1527 | 56 | 1528 | 72 | 1525 | 53 |
| Foster youth | 271 | 1520 | 55 | 1526 | 72 | 1514 | 54 |
| Not foster youth | 89,105 | 1526 | 57 | 1527 | 73 | 1524 | 53 |
| American Indian or Alaska Native—Not economically disadvantaged | 12 | 1536 | 59 | 1537 | 63 | 1535 | 66 |
| American Indian or Alaska Native—Economically disadvantaged | 108 | 1514 | 48 | 1513 | 55 | 1514 | 51 |
| Asian—Not economically disadvantaged | 2,714 | 1541 | 72 | 1540 | 94 | 1542 | 62 |
| Asian—Economically disadvantaged | 5,281 | 1534 | 64 | 1533 | 81 | 1535 | 59 |
| Native Hawaiian or Other Pacific Islander—Not economically disadvantaged | 56 | 1529 | 73 | 1532 | 98 | 1524 | 56 |
| Native Hawaiian or Other Pacific Islander—Economically disadvantaged | 215 | 1515 | 57 | 1515 | 71 | 1514 | 51 |
| Filipino—Not economically disadvantaged | 312 | 1534 | 53 | 1529 | 64 | 1538 | 52 |
| Filipino—Economically disadvantaged | 461 | 1540 | 48 | 1536 | 63 | 1543 | 46 |
| Hispanic or Latino—Not economically disadvantaged | 7,119 | 1521 | 65 | 1519 | 85 | 1522 | 57 |
| Hispanic or Latino—Economically disadvantaged | 67,539 | 1525 | 54 | 1527 | 69 | 1523 | 51 |
| Black or African American—Not economically disadvantaged | 84 | 1529 | 60 | 1530 | 79 | 1527 | 53 |
| Black or African American—Economically disadvantaged | 317 | 1523 | 62 | 1524 | 75 | 1523 | 60 |
| White—Not economically disadvantaged | 1,041 | 1530 | 74 | 1529 | 94 | 1530 | 64 |
| White—Economically disadvantaged | 3,070 | 1520 | 65 | 1521 | 82 | 1519 | 58 |
| Two or more races—Not economically disadvantaged | 252 | 1525 | 81 | 1525 | 104 | 1524 | 69 |
| Two or more races—Economically disadvantaged | 795 | 1521 | 63 | 1521 | 82 | 1520 | 55 |

Table 7.D.7 Mean and Standard Deviation of Overall, Written Language, and Oral Language Scale Scores by Student Group, Grade Six

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Student Group** | **Number of Students Tested** | **Overall Scale Score Mean** | **Overall Scale Score SD** | **Oral Language Scale Score Mean** | **Oral Language Scale Score SD** | **Written Language Scale Score Mean** | **Written Language Scale Score SD** |
| All | 75,878 | 1526 | 57 | 1527 | 75 | 1525 | 49 |
| Male | 40,417 | 1525 | 58 | 1529 | 77 | 1519 | 49 |
| Female | 35,446 | 1528 | 55 | 1525 | 72 | 1532 | 48 |
| Nonbinary | 15 | 1520 | 48 | 1519 | 61 | 1521 | 42 |
| American Indian or Alaska Native | 103 | 1516 | 50 | 1511 | 65 | 1520 | 45 |
| Asian | 6,160 | 1535 | 68 | 1536 | 91 | 1533 | 55 |
| Native Hawaiian or Other Pacific Islander | 236 | 1523 | 51 | 1522 | 69 | 1522 | 44 |
| Filipino | 654 | 1545 | 50 | 1544 | 66 | 1546 | 44 |
| Hispanic or Latino | 64,112 | 1526 | 54 | 1527 | 72 | 1524 | 48 |
| Black or African American | 335 | 1533 | 61 | 1540 | 83 | 1525 | 51 |
| White | 3,446 | 1523 | 69 | 1523 | 91 | 1521 | 56 |
| Two or more races | 832 | 1522 | 67 | 1521 | 89 | 1523 | 55 |
| No reported disabilities | 62,315 | 1531 | 57 | 1532 | 77 | 1531 | 48 |
| Reported disabilities | 13,563 | 1503 | 46 | 1507 | 60 | 1498 | 43 |
| Not economically disadvantaged | 9,974 | 1526 | 68 | 1526 | 90 | 1527 | 55 |
| Economically disadvantaged | 65,904 | 1526 | 55 | 1527 | 72 | 1525 | 48 |
| In US schools less than 12 months | 4,118 | 1447 | 65 | 1422 | 87 | 1473 | 50 |
| In US schools 12 months or more | 71,299 | 1531 | 52 | 1534 | 69 | 1528 | 47 |
| Duration unknown | 461 | 1495 | 63 | 1488 | 83 | 1501 | 51 |
| Migrant education | 2,055 | 1515 | 60 | 1511 | 79 | 1519 | 50 |
| Not migrant education | 73,823 | 1527 | 56 | 1528 | 75 | 1525 | 49 |
| Armed forces family member | 721 | 1535 | 52 | 1540 | 71 | 1529 | 45 |
| Not armed forces family member | 75,157 | 1526 | 57 | 1527 | 75 | 1525 | 49 |
| Homeless | 4,899 | 1511 | 62 | 1507 | 82 | 1515 | 52 |
| Not homeless | 70,979 | 1527 | 56 | 1529 | 74 | 1526 | 49 |
| Foster youth | 240 | 1516 | 54 | 1517 | 69 | 1514 | 49 |
| Not foster youth | 75,638 | 1526 | 57 | 1527 | 75 | 1525 | 49 |
| American Indian or Alaska Native—Not economically disadvantaged | 15 | 1498 | 56 | 1489 | 79 | 1507 | 40 |
| American Indian or Alaska Native—Economically disadvantaged | 88 | 1519 | 49 | 1515 | 62 | 1522 | 45 |
| Asian—Not economically disadvantaged | 2,096 | 1539 | 72 | 1541 | 97 | 1537 | 56 |
| Asian—Economically disadvantaged | 4,064 | 1532 | 66 | 1533 | 87 | 1531 | 54 |
| Native Hawaiian or Other Pacific Islander—Not economically disadvantaged | 50 | 1529 | 39 | 1530 | 51 | 1528 | 37 |
| Native Hawaiian or Other Pacific Islander—Economically disadvantaged | 186 | 1521 | 54 | 1520 | 73 | 1521 | 46 |
| Filipino—Not economically disadvantaged | 273 | 1543 | 53 | 1541 | 70 | 1544 | 47 |
| Filipino—Economically disadvantaged | 381 | 1547 | 47 | 1547 | 64 | 1547 | 42 |
| Hispanic or Latino—Not economically disadvantaged | 6,440 | 1521 | 65 | 1520 | 86 | 1522 | 53 |
| Hispanic or Latino—Economically disadvantaged | 57,672 | 1526 | 53 | 1527 | 70 | 1524 | 47 |
| Black or African American—Not economically disadvantaged | 80 | 1534 | 62 | 1541 | 85 | 1527 | 50 |
| Black or African American—Economically disadvantaged | 255 | 1532 | 61 | 1539 | 82 | 1524 | 51 |
| White—Not economically disadvantaged | 813 | 1529 | 74 | 1531 | 97 | 1528 | 60 |
| White—Economically disadvantaged | 2,633 | 1520 | 67 | 1521 | 89 | 1520 | 54 |
| Two or more races—Not economically disadvantaged | 207 | 1516 | 85 | 1511 | 111 | 1521 | 68 |
| Two or more races—Economically disadvantaged | 625 | 1524 | 60 | 1524 | 81 | 1524 | 50 |

Table 7.D.8 Mean and Standard Deviation of Overall, Written Language, and Oral Language Scale Scores by Student Group, Grade Seven

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Student Group** | **Number of Students Tested** | **Overall Scale Score Mean** | **Overall Scale Score SD** | **Oral Language Scale Score Mean** | **Oral Language Scale Score SD** | **Written Language Scale Score Mean** | **Written Language Scale Score SD** |
| All | 66,271 | 1538 | 64 | 1541 | 86 | 1535 | 53 |
| Male | 35,503 | 1536 | 65 | 1543 | 88 | 1529 | 53 |
| Female | 30,762 | 1540 | 63 | 1538 | 84 | 1541 | 53 |
| Nonbinary | 6 | N/A | N/A | N/A | N/A | N/A | N/A |
| American Indian or Alaska Native | 93 | 1526 | 67 | 1529 | 90 | 1521 | 54 |
| Asian | 5,390 | 1548 | 74 | 1551 | 99 | 1545 | 59 |
| Native Hawaiian or Other Pacific Islander | 216 | 1535 | 61 | 1538 | 78 | 1532 | 55 |
| Filipino | 640 | 1559 | 53 | 1561 | 71 | 1557 | 46 |
| Hispanic or Latino | 55,750 | 1537 | 62 | 1540 | 83 | 1534 | 52 |
| Black or African American | 315 | 1535 | 70 | 1538 | 96 | 1531 | 55 |
| White | 3,204 | 1534 | 75 | 1536 | 100 | 1532 | 59 |
| Two or more races | 663 | 1529 | 74 | 1531 | 99 | 1526 | 59 |
| No reported disabilities | 53,863 | 1543 | 66 | 1545 | 90 | 1540 | 54 |
| Reported disabilities | 12,408 | 1516 | 49 | 1522 | 65 | 1510 | 45 |
| Not economically disadvantaged | 8,803 | 1535 | 77 | 1536 | 103 | 1534 | 61 |
| Economically disadvantaged | 57,468 | 1538 | 62 | 1541 | 83 | 1535 | 52 |
| In US schools less than 12 months | 4,057 | 1447 | 66 | 1418 | 87 | 1476 | 52 |
| In US schools 12 months or more | 61,798 | 1544 | 59 | 1549 | 79 | 1539 | 51 |
| Duration unknown | 416 | 1495 | 74 | 1485 | 96 | 1504 | 58 |
| Migrant education | 1,732 | 1523 | 70 | 1520 | 93 | 1526 | 56 |
| Not migrant education | 64,539 | 1538 | 64 | 1541 | 86 | 1535 | 53 |
| Armed forces family member | 607 | 1548 | 61 | 1554 | 81 | 1542 | 53 |
| Not armed forces family member | 65,664 | 1538 | 64 | 1541 | 86 | 1535 | 53 |
| Homeless | 4,189 | 1515 | 73 | 1511 | 98 | 1518 | 57 |
| Not homeless | 62,082 | 1539 | 63 | 1543 | 85 | 1536 | 53 |
| Foster youth | 200 | 1526 | 64 | 1532 | 90 | 1520 | 50 |
| Not foster youth | 66,071 | 1538 | 64 | 1541 | 86 | 1535 | 53 |
| American Indian or Alaska Native—Not economically disadvantaged | 16 | 1516 | 84 | 1520 | 108 | 1512 | 69 |
| American Indian or Alaska Native—Economically disadvantaged | 77 | 1528 | 63 | 1531 | 86 | 1523 | 51 |
| Asian—Not economically disadvantaged | 1,816 | 1552 | 80 | 1555 | 107 | 1548 | 63 |
| Asian—Economically disadvantaged | 3,574 | 1546 | 71 | 1549 | 95 | 1543 | 57 |
| Native Hawaiian or Other Pacific Islander—Not economically disadvantaged | 44 | 1537 | 63 | 1543 | 83 | 1530 | 54 |
| Native Hawaiian or Other Pacific Islander—Economically disadvantaged | 172 | 1535 | 61 | 1536 | 77 | 1533 | 55 |
| Filipino—Not economically disadvantaged | 251 | 1562 | 57 | 1566 | 80 | 1556 | 46 |
| Filipino—Economically disadvantaged | 389 | 1558 | 50 | 1558 | 65 | 1557 | 47 |
| Hispanic or Latino—Not economically disadvantaged | 5,707 | 1528 | 75 | 1528 | 100 | 1529 | 59 |
| Hispanic or Latino—Economically disadvantaged | 50,043 | 1538 | 61 | 1541 | 81 | 1534 | 51 |
| Black or African American—Not economically disadvantaged | 69 | 1541 | 75 | 1545 | 103 | 1535 | 58 |
| Black or African American—Economically disadvantaged | 246 | 1533 | 69 | 1536 | 94 | 1530 | 55 |
| White—Not economically disadvantaged | 700 | 1539 | 83 | 1541 | 110 | 1536 | 66 |
| White—Economically disadvantaged | 2,504 | 1533 | 72 | 1534 | 97 | 1531 | 57 |
| Two or more races—Not economically disadvantaged | 200 | 1526 | 84 | 1525 | 112 | 1526 | 65 |
| Two or more races—Economically disadvantaged | 463 | 1530 | 69 | 1534 | 93 | 1526 | 56 |

Table 7.D.9 Mean and Standard Deviation of Overall, Written Language, and Oral Language Scale Scores by Student Group, Grade Eight

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Student Group** | **Number of Students Tested** | **Overall Scale Score Mean** | **Overall Scale Score SD** | **Oral Language Scale Score Mean** | **Oral Language Scale Score SD** | **Written Language Scale Score Mean** | **Written Language Scale Score SD** |
| All | 60,498 | 1549 | 70 | 1553 | 95 | 1545 | 57 |
| Male | 33,042 | 1548 | 71 | 1556 | 97 | 1539 | 57 |
| Female | 27,444 | 1551 | 69 | 1551 | 93 | 1552 | 56 |
| Nonbinary | 12 | 1568 | 29 | 1582 | 34 | 1552 | 44 |
| American Indian or Alaska Native | 95 | 1545 | 66 | 1552 | 89 | 1537 | 55 |
| Asian | 4,568 | 1556 | 79 | 1560 | 107 | 1552 | 62 |
| Native Hawaiian or Other Pacific Islander | 199 | 1542 | 58 | 1545 | 75 | 1538 | 51 |
| Filipino | 612 | 1568 | 56 | 1571 | 78 | 1564 | 48 |
| Hispanic or Latino | 51,457 | 1549 | 69 | 1553 | 93 | 1544 | 56 |
| Black or African American | 256 | 1555 | 77 | 1566 | 111 | 1543 | 56 |
| White | 2,760 | 1547 | 80 | 1551 | 109 | 1543 | 63 |
| Two or more races | 551 | 1543 | 83 | 1551 | 116 | 1534 | 62 |
| No reported disabilities | 48,876 | 1554 | 73 | 1557 | 99 | 1550 | 58 |
| Reported disabilities | 11,622 | 1530 | 55 | 1537 | 73 | 1522 | 48 |
| Not economically disadvantaged | 7,989 | 1544 | 82 | 1545 | 110 | 1543 | 64 |
| Economically disadvantaged | 52,509 | 1550 | 68 | 1555 | 93 | 1545 | 56 |
| In US schools less than 12 months | 3,700 | 1452 | 68 | 1422 | 88 | 1481 | 54 |
| In US schools 12 months or more | 56,442 | 1556 | 65 | 1562 | 89 | 1549 | 55 |
| Duration unknown | 356 | 1507 | 83 | 1498 | 113 | 1516 | 62 |
| Migrant education | 1,640 | 1533 | 79 | 1530 | 106 | 1535 | 61 |
| Not migrant education | 58,858 | 1550 | 70 | 1554 | 95 | 1545 | 57 |
| Armed forces family member | 769 | 1559 | 64 | 1567 | 86 | 1551 | 54 |
| Not armed forces family member | 59,729 | 1549 | 70 | 1553 | 95 | 1545 | 57 |
| Homeless | 4,012 | 1524 | 78 | 1519 | 104 | 1528 | 62 |
| Not homeless | 56,486 | 1551 | 69 | 1556 | 94 | 1546 | 57 |
| Foster youth | 206 | 1539 | 70 | 1547 | 94 | 1531 | 56 |
| Not foster youth | 60,292 | 1549 | 70 | 1553 | 95 | 1545 | 57 |
| American Indian or Alaska Native—Not economically disadvantaged | 7 | N/A | N/A | N/A | N/A | N/A | N/A |
| American Indian or Alaska Native—Economically disadvantaged | 88 | 1548 | 65 | 1555 | 90 | 1540 | 54 |
| Asian—Not economically disadvantaged | 1,475 | 1562 | 83 | 1566 | 112 | 1557 | 65 |
| Asian—Economically disadvantaged | 3,093 | 1554 | 77 | 1557 | 104 | 1550 | 60 |
| Native Hawaiian or Other Pacific Islander—Not economically disadvantaged | 51 | 1546 | 68 | 1555 | 94 | 1536 | 48 |
| Native Hawaiian or Other Pacific Islander—Economically disadvantaged | 148 | 1541 | 55 | 1541 | 68 | 1539 | 52 |
| Filipino—Not economically disadvantaged | 226 | 1568 | 61 | 1570 | 83 | 1564 | 51 |
| Filipino—Economically disadvantaged | 386 | 1568 | 53 | 1572 | 75 | 1564 | 46 |
| Hispanic or Latino—Not economically disadvantaged | 5,414 | 1539 | 80 | 1538 | 108 | 1538 | 63 |
| Hispanic or Latino—Economically disadvantaged | 46,043 | 1550 | 67 | 1554 | 91 | 1545 | 55 |
| Black or African American—Not economically disadvantaged | 58 | 1546 | 75 | 1557 | 104 | 1535 | 59 |
| Black or African American—Economically disadvantaged | 198 | 1557 | 78 | 1569 | 113 | 1545 | 55 |
| White—Not economically disadvantaged | 625 | 1548 | 88 | 1551 | 119 | 1544 | 69 |
| White—Economically disadvantaged | 2,135 | 1547 | 78 | 1550 | 106 | 1543 | 61 |
| Two or more races—Not economically disadvantaged | 133 | 1526 | 94 | 1526 | 132 | 1526 | 69 |
| Two or more races—Economically disadvantaged | 418 | 1548 | 79 | 1559 | 109 | 1537 | 60 |

Table 7.D.10 Mean and Standard Deviation of Overall, Written Language, and Oral Language Scale Scores by Student Group, Grade Nine

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Student Group** | **Number of Students Tested** | **Overall Scale Score Mean** | **Overall Scale Score SD** | **Oral Language Scale Score Mean** | **Oral Language Scale Score SD** | **Written Language Scale Score Mean** | **Written Language Scale Score SD** |
| All | 60,129 | 1532 | 75 | 1526 | 103 | 1537 | 58 |
| Male | 33,682 | 1529 | 76 | 1525 | 104 | 1532 | 58 |
| Female | 26,420 | 1535 | 74 | 1528 | 102 | 1543 | 56 |
| Nonbinary | 27 | 1539 | 59 | 1537 | 77 | 1540 | 53 |
| American Indian or Alaska Native | 83 | 1521 | 64 | 1512 | 78 | 1530 | 61 |
| Asian | 4,419 | 1548 | 77 | 1541 | 103 | 1554 | 61 |
| Native Hawaiian or Other Pacific Islander | 209 | 1542 | 58 | 1541 | 77 | 1544 | 50 |
| Filipino | 647 | 1561 | 61 | 1556 | 81 | 1565 | 52 |
| Hispanic or Latino | 51,098 | 1530 | 75 | 1525 | 103 | 1535 | 57 |
| Black or African American | 288 | 1546 | 85 | 1543 | 117 | 1549 | 62 |
| White | 2,754 | 1534 | 78 | 1529 | 105 | 1539 | 61 |
| Two or more races | 631 | 1515 | 88 | 1503 | 119 | 1526 | 65 |
| No reported disabilities | 48,913 | 1533 | 79 | 1526 | 109 | 1540 | 59 |
| Reported disabilities | 11,216 | 1527 | 53 | 1529 | 72 | 1525 | 47 |
| Not economically disadvantaged | 9,147 | 1517 | 91 | 1504 | 125 | 1530 | 67 |
| Economically disadvantaged | 50,982 | 1535 | 72 | 1530 | 98 | 1538 | 56 |
| In US schools less than 12 months | 6,910 | 1434 | 72 | 1390 | 97 | 1477 | 54 |
| In US schools 12 months or more | 52,574 | 1545 | 65 | 1545 | 89 | 1545 | 53 |
| Duration unknown | 645 | 1496 | 85 | 1478 | 116 | 1513 | 62 |
| Migrant education | 1,338 | 1518 | 83 | 1506 | 115 | 1529 | 61 |
| Not migrant education | 58,791 | 1532 | 75 | 1527 | 103 | 1537 | 57 |
| Armed forces family member | 569 | 1551 | 65 | 1554 | 92 | 1547 | 52 |
| Not armed forces family member | 59,560 | 1532 | 75 | 1526 | 103 | 1537 | 58 |
| Homeless | 3,806 | 1500 | 83 | 1483 | 114 | 1516 | 61 |
| Not homeless | 56,323 | 1534 | 74 | 1529 | 102 | 1538 | 57 |
| Foster youth | 241 | 1522 | 76 | 1520 | 105 | 1524 | 57 |
| Not foster youth | 59,888 | 1532 | 75 | 1526 | 103 | 1537 | 58 |
| American Indian or Alaska Native—Not economically disadvantaged | 12 | 1526 | 86 | 1515 | 100 | 1536 | 78 |
| American Indian or Alaska Native—Economically disadvantaged | 71 | 1521 | 61 | 1512 | 74 | 1529 | 59 |
| Asian—Not economically disadvantaged | 1,387 | 1558 | 82 | 1552 | 112 | 1564 | 63 |
| Asian—Economically disadvantaged | 3,032 | 1543 | 74 | 1536 | 99 | 1549 | 60 |
| Native Hawaiian or Other Pacific Islander—Not economically disadvantaged | 50 | 1536 | 63 | 1530 | 83 | 1541 | 51 |
| Native Hawaiian or Other Pacific Islander—Economically disadvantaged | 159 | 1545 | 57 | 1544 | 74 | 1545 | 50 |
| Filipino—Not economically disadvantaged | 290 | 1558 | 57 | 1552 | 79 | 1564 | 47 |
| Filipino—Economically disadvantaged | 357 | 1563 | 63 | 1558 | 84 | 1567 | 56 |
| Hispanic or Latino—Not economically disadvantaged | 6,500 | 1504 | 91 | 1489 | 126 | 1519 | 65 |
| Hispanic or Latino—Economically disadvantaged | 44,598 | 1534 | 71 | 1530 | 98 | 1537 | 55 |
| Black or African American—Not economically disadvantaged | 73 | 1552 | 82 | 1555 | 115 | 1549 | 58 |
| Black or African American—Economically disadvantaged | 215 | 1544 | 86 | 1540 | 118 | 1549 | 64 |
| White—Not economically disadvantaged | 633 | 1541 | 86 | 1535 | 117 | 1546 | 66 |
| White—Economically disadvantaged | 2,121 | 1532 | 75 | 1527 | 101 | 1537 | 59 |
| Two or more races—Not economically disadvantaged | 202 | 1490 | 100 | 1470 | 136 | 1511 | 70 |
| Two or more races—Economically disadvantaged | 429 | 1526 | 80 | 1518 | 106 | 1533 | 61 |

Table 7.D.11 Mean and Standard Deviation of Overall, Written Language, and Oral Language Scale Scores by Student Group, Grade Ten

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Student Group** | **Number of Students Tested** | **Overall Scale Score Mean** | **Overall Scale Score SD** | **Oral Language Scale Score Mean** | **Oral Language Scale Score SD** | **Written Language Scale Score Mean** | **Written Language Scale Score SD** |
| All | 57,330 | 1546 | 79 | 1544 | 110 | 1547 | 60 |
| Male | 32,394 | 1543 | 80 | 1544 | 112 | 1542 | 61 |
| Female | 24,917 | 1549 | 78 | 1545 | 108 | 1553 | 58 |
| Nonbinary | 19 | 1559 | 90 | 1574 | 135 | 1543 | 58 |
| American Indian or Alaska Native | 95 | 1542 | 86 | 1541 | 123 | 1541 | 60 |
| Asian | 4,314 | 1559 | 79 | 1556 | 108 | 1561 | 61 |
| Native Hawaiian or Other Pacific Islander | 179 | 1548 | 59 | 1545 | 80 | 1550 | 47 |
| Filipino | 653 | 1573 | 64 | 1570 | 88 | 1575 | 54 |
| Hispanic or Latino | 48,713 | 1544 | 79 | 1543 | 110 | 1545 | 59 |
| Black or African American | 285 | 1552 | 90 | 1552 | 125 | 1552 | 66 |
| White | 2,582 | 1547 | 83 | 1546 | 113 | 1547 | 64 |
| Two or more races | 509 | 1543 | 82 | 1540 | 114 | 1545 | 60 |
| No reported disabilities | 46,707 | 1547 | 83 | 1544 | 116 | 1550 | 61 |
| Reported disabilities | 10,623 | 1539 | 57 | 1544 | 79 | 1534 | 49 |
| Not economically disadvantaged | 8,385 | 1543 | 87 | 1539 | 119 | 1547 | 65 |
| Economically disadvantaged | 48,945 | 1546 | 78 | 1545 | 108 | 1547 | 59 |
| In US schools less than 12 months | 4,333 | 1456 | 79 | 1418 | 107 | 1493 | 59 |
| In US schools 12 months or more | 52,538 | 1553 | 74 | 1555 | 103 | 1551 | 58 |
| Duration unknown | 459 | 1511 | 93 | 1497 | 131 | 1523 | 65 |
| Migrant education | 1,435 | 1524 | 86 | 1514 | 121 | 1534 | 61 |
| Not migrant education | 55,895 | 1546 | 79 | 1545 | 110 | 1547 | 60 |
| Armed forces family member | 790 | 1563 | 67 | 1567 | 93 | 1558 | 54 |
| Not armed forces family member | 56,540 | 1545 | 79 | 1544 | 110 | 1546 | 60 |
| Homeless | 3,547 | 1520 | 87 | 1510 | 120 | 1530 | 62 |
| Not homeless | 53,783 | 1547 | 78 | 1547 | 109 | 1548 | 59 |
| Foster youth | 247 | 1527 | 71 | 1523 | 94 | 1530 | 59 |
| Not foster youth | 57,083 | 1546 | 79 | 1544 | 110 | 1547 | 60 |
| American Indian or Alaska Native—Not economically disadvantaged | 22 | 1535 | 84 | 1540 | 122 | 1529 | 53 |
| American Indian or Alaska Native—Economically disadvantaged | 73 | 1544 | 88 | 1542 | 124 | 1545 | 61 |
| Asian—Not economically disadvantaged | 1,363 | 1567 | 80 | 1563 | 110 | 1570 | 62 |
| Asian—Economically disadvantaged | 2,951 | 1556 | 78 | 1553 | 107 | 1558 | 60 |
| Native Hawaiian or Other Pacific Islander—Not economically disadvantaged | 43 | 1561 | 60 | 1567 | 89 | 1553 | 46 |
| Native Hawaiian or Other Pacific Islander—Economically disadvantaged | 136 | 1544 | 58 | 1538 | 76 | 1549 | 48 |
| Filipino—Not economically disadvantaged | 263 | 1573 | 65 | 1569 | 86 | 1576 | 57 |
| Filipino—Economically disadvantaged | 390 | 1573 | 63 | 1571 | 89 | 1573 | 52 |
| Hispanic or Latino—Not economically disadvantaged | 5,961 | 1535 | 87 | 1530 | 121 | 1539 | 64 |
| Hispanic or Latino—Economically disadvantaged | 42,752 | 1545 | 78 | 1545 | 108 | 1546 | 59 |
| Black or African American—Not economically disadvantaged | 65 | 1554 | 85 | 1556 | 118 | 1552 | 67 |
| Black or African American—Economically disadvantaged | 220 | 1551 | 91 | 1551 | 128 | 1552 | 66 |
| White—Not economically disadvantaged | 561 | 1557 | 86 | 1556 | 116 | 1557 | 70 |
| White—Economically disadvantaged | 2,021 | 1544 | 82 | 1543 | 112 | 1544 | 62 |
| Two or more races—Not economically disadvantaged | 107 | 1548 | 89 | 1544 | 127 | 1552 | 60 |
| Two or more races—Economically disadvantaged | 402 | 1541 | 80 | 1540 | 110 | 1543 | 60 |

Table 7.D.12 Mean and Standard Deviation of Overall, Written Language, and Oral Language Scale Scores by Student Group, Grade Eleven

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Student Group** | **Number of Students Tested** | **Overall Scale Score Mean** | **Overall Scale Score SD** | **Oral Language Scale Score Mean** | **Oral Language Scale Score SD** | **Written Language Scale Score Mean** | **Written Language Scale Score SD** |
| All | 49,460 | 1546 | 73 | 1541 | 95 | 1550 | 62 |
| Male | 27,836 | 1543 | 73 | 1540 | 96 | 1546 | 62 |
| Female | 21,595 | 1549 | 72 | 1543 | 95 | 1556 | 60 |
| Nonbinary | 29 | 1579 | 65 | 1577 | 76 | 1580 | 69 |
| American Indian or Alaska Native | 67 | 1560 | 65 | 1560 | 85 | 1561 | 54 |
| Asian | 3,904 | 1560 | 80 | 1556 | 103 | 1564 | 68 |
| Native Hawaiian or Other Pacific Islander | 171 | 1554 | 58 | 1551 | 76 | 1556 | 50 |
| Filipino | 674 | 1574 | 58 | 1567 | 76 | 1581 | 53 |
| Hispanic or Latino | 41,847 | 1544 | 72 | 1539 | 94 | 1549 | 60 |
| Black or African American | 239 | 1560 | 74 | 1561 | 96 | 1558 | 65 |
| White | 2,117 | 1552 | 80 | 1550 | 105 | 1553 | 67 |
| Two or more races | 441 | 1537 | 86 | 1532 | 112 | 1541 | 71 |
| No reported disabilities | 39,990 | 1549 | 77 | 1543 | 101 | 1554 | 63 |
| Reported disabilities | 9,470 | 1535 | 53 | 1535 | 68 | 1535 | 50 |
| Not economically disadvantaged | 7,352 | 1543 | 83 | 1536 | 109 | 1550 | 68 |
| Economically disadvantaged | 42,108 | 1547 | 71 | 1542 | 93 | 1551 | 60 |
| In US schools less than 12 months | 3,450 | 1460 | 78 | 1425 | 100 | 1494 | 63 |
| In US schools 12 months or more | 45,607 | 1553 | 68 | 1550 | 89 | 1555 | 59 |
| Duration unknown | 403 | 1508 | 84 | 1492 | 108 | 1524 | 68 |
| Migrant education | 1,344 | 1528 | 79 | 1515 | 104 | 1540 | 63 |
| Not migrant education | 48,116 | 1547 | 73 | 1542 | 95 | 1551 | 61 |
| Armed forces family member | 728 | 1560 | 65 | 1560 | 88 | 1559 | 55 |
| Not armed forces family member | 48,732 | 1546 | 73 | 1541 | 95 | 1550 | 62 |
| Homeless | 3,235 | 1520 | 81 | 1508 | 107 | 1532 | 64 |
| Not homeless | 46,225 | 1548 | 72 | 1543 | 94 | 1552 | 61 |
| Foster youth | 223 | 1516 | 72 | 1505 | 96 | 1526 | 57 |
| Not foster youth | 49,237 | 1546 | 73 | 1541 | 95 | 1551 | 62 |
| American Indian or Alaska Native—Not economically disadvantaged | 14 | 1552 | 63 | 1552 | 77 | 1551 | 58 |
| American Indian or Alaska Native—Economically disadvantaged | 53 | 1563 | 65 | 1562 | 87 | 1563 | 54 |
| Asian—Not economically disadvantaged | 1,143 | 1567 | 83 | 1563 | 108 | 1570 | 70 |
| Asian—Economically disadvantaged | 2,761 | 1558 | 78 | 1553 | 101 | 1562 | 67 |
| Native Hawaiian or Other Pacific Islander—Not economically disadvantaged | 39 | 1555 | 64 | 1552 | 81 | 1557 | 53 |
| Native Hawaiian or Other Pacific Islander—Economically disadvantaged | 132 | 1553 | 56 | 1551 | 74 | 1555 | 50 |
| Filipino—Not economically disadvantaged | 272 | 1577 | 58 | 1569 | 73 | 1584 | 57 |
| Filipino—Economically disadvantaged | 402 | 1573 | 57 | 1565 | 78 | 1580 | 50 |
| Hispanic or Latino—Not economically disadvantaged | 5,277 | 1535 | 82 | 1527 | 109 | 1543 | 66 |
| Hispanic or Latino—Economically disadvantaged | 36,570 | 1545 | 70 | 1541 | 92 | 1549 | 59 |
| Black or African American—Not economically disadvantaged | 56 | 1567 | 74 | 1573 | 98 | 1560 | 62 |
| Black or African American—Economically disadvantaged | 183 | 1558 | 75 | 1558 | 95 | 1558 | 67 |
| White—Not economically disadvantaged | 454 | 1560 | 84 | 1558 | 109 | 1561 | 71 |
| White—Economically disadvantaged | 1,663 | 1550 | 79 | 1547 | 104 | 1551 | 66 |
| Two or more races—Not economically disadvantaged | 97 | 1533 | 96 | 1528 | 124 | 1537 | 78 |
| Two or more races—Economically disadvantaged | 344 | 1538 | 83 | 1533 | 108 | 1543 | 69 |

Table 7.D.13 Mean and Standard Deviation of Overall, Written Language, and Oral Language Scale Scores by Student Group, Grade Twelve

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Student Group** | **Number of Students Tested** | **Overall Scale Score Mean** | **Overall Scale Score SD** | **Oral Language Scale Score Mean** | **Oral Language Scale Score SD** | **Written Language Scale Score Mean** | **Written Language Scale Score SD** |
| All | 39,652 | 1546 | 74 | 1543 | 98 | 1548 | 62 |
| Male | 22,652 | 1543 | 75 | 1542 | 98 | 1544 | 63 |
| Female | 16,986 | 1549 | 73 | 1544 | 97 | 1553 | 60 |
| Nonbinary | 14 | 1533 | 57 | 1535 | 76 | 1530 | 47 |
| American Indian or Alaska Native | 45 | 1541 | 73 | 1531 | 93 | 1550 | 65 |
| Asian | 3,427 | 1556 | 78 | 1553 | 102 | 1558 | 66 |
| Native Hawaiian or Other Pacific Islander | 140 | 1556 | 64 | 1558 | 85 | 1553 | 57 |
| Filipino | 612 | 1568 | 58 | 1565 | 73 | 1570 | 55 |
| Hispanic or Latino | 33,288 | 1544 | 73 | 1541 | 97 | 1546 | 61 |
| Black or African American | 228 | 1558 | 77 | 1558 | 98 | 1557 | 68 |
| White | 1,606 | 1551 | 86 | 1550 | 111 | 1551 | 72 |
| Two or more races | 306 | 1541 | 75 | 1533 | 93 | 1548 | 66 |
| No reported disabilities | 31,933 | 1548 | 78 | 1545 | 103 | 1551 | 64 |
| Reported disabilities | 7,719 | 1535 | 55 | 1536 | 71 | 1533 | 52 |
| Not economically disadvantaged | 5,727 | 1546 | 81 | 1543 | 107 | 1549 | 67 |
| Economically disadvantaged | 33,925 | 1546 | 73 | 1543 | 96 | 1547 | 61 |
| In US schools less than 12 months | 2,058 | 1467 | 84 | 1433 | 106 | 1501 | 69 |
| In US schools 12 months or more | 37,419 | 1550 | 71 | 1549 | 94 | 1550 | 60 |
| Duration unknown | 175 | 1517 | 88 | 1505 | 112 | 1529 | 78 |
| Migrant education | 1,048 | 1530 | 80 | 1518 | 106 | 1540 | 64 |
| Not migrant education | 38,604 | 1546 | 74 | 1544 | 98 | 1548 | 62 |
| Armed forces family member | 529 | 1558 | 65 | 1561 | 84 | 1555 | 57 |
| Not armed forces family member | 39,123 | 1545 | 74 | 1543 | 98 | 1547 | 62 |
| Homeless | 2,996 | 1525 | 80 | 1516 | 107 | 1533 | 63 |
| Not homeless | 36,656 | 1547 | 73 | 1545 | 97 | 1549 | 62 |
| Foster youth | 193 | 1513 | 63 | 1504 | 83 | 1522 | 54 |
| Not foster youth | 39,459 | 1546 | 74 | 1543 | 98 | 1548 | 62 |
| American Indian or Alaska Native—Not economically disadvantaged | 10 | N/A | N/A | N/A | N/A | N/A | N/A |
| American Indian or Alaska Native—Economically disadvantaged | 35 | 1547 | 70 | 1540 | 90 | 1554 | 63 |
| Asian—Not economically disadvantaged | 899 | 1563 | 78 | 1561 | 103 | 1564 | 66 |
| Asian—Economically disadvantaged | 2,528 | 1553 | 78 | 1550 | 102 | 1556 | 66 |
| Native Hawaiian or Other Pacific Islander—Not economically disadvantaged | 21 | 1558 | 51 | 1562 | 68 | 1555 | 44 |
| Native Hawaiian or Other Pacific Islander—Economically disadvantaged | 119 | 1555 | 66 | 1558 | 88 | 1553 | 60 |
| Filipino—Not economically disadvantaged | 242 | 1572 | 61 | 1571 | 80 | 1571 | 58 |
| Filipino—Economically disadvantaged | 370 | 1565 | 55 | 1560 | 68 | 1569 | 53 |
| Hispanic or Latino—Not economically disadvantaged | 4,099 | 1538 | 81 | 1534 | 108 | 1542 | 66 |
| Hispanic or Latino—Economically disadvantaged | 29,189 | 1545 | 72 | 1542 | 95 | 1546 | 60 |
| Black or African American—Not economically disadvantaged | 51 | 1553 | 61 | 1545 | 74 | 1559 | 62 |
| Black or African American—Economically disadvantaged | 177 | 1560 | 81 | 1562 | 104 | 1557 | 70 |
| White—Not economically disadvantaged | 341 | 1575 | 91 | 1576 | 117 | 1573 | 78 |
| White—Economically disadvantaged | 1,265 | 1544 | 83 | 1543 | 108 | 1545 | 69 |
| Two or more races—Not economically disadvantaged | 64 | 1544 | 84 | 1538 | 106 | 1550 | 71 |
| Two or more races—Economically disadvantaged | 242 | 1540 | 72 | 1532 | 89 | 1547 | 65 |

### Appendix 7.E: Percentage of Students in Each Proficiency Level for Overall Assessment and Composites

**Note:** In table 7.E.1 through table 7.E.13, to protect privacy, when the number of students in a student group is 10 or fewer, the summary statistics of scale scores and proficiency levels are not reported, but are replaced by “N/A.”

Table 7.E.1 Percentage of Students in Each Proficiency Level—Overall Assessment and Composites by Student Group, Kindergarten

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Student Group** | **Overall Proficiency Level 1** | **Overall Proficiency Level 2** | **Overall Proficiency Level 3** | **Overall Proficiency Level 4** | **Oral Language Proficiency Level 1** | **Oral Language Proficiency Level 2** | **Oral Language Proficiency Level 3** | **Oral Language Proficiency Level 4** | **Written Language Proficiency Level 1** | **Written Language Proficiency Level 2** | **Written Language Proficiency Level 3** | **Written Language Proficiency Level 4** |
| All | 21 | 34 | 29 | 16 | 22 | 29 | 31 | 17 | 23 | 45 | 21 | 10 |
| Male | 24 | 34 | 27 | 15 | 25 | 30 | 29 | 16 | 25 | 44 | 20 | 10 |
| Female | 19 | 34 | 31 | 17 | 20 | 28 | 33 | 19 | 21 | 46 | 22 | 11 |
| Nonbinary | 45 | 27 | 18 | 9 | 45 | 27 | 18 | 9 | 45 | 36 | 9 | 9 |
| American Indian or Alaska Native | 23 | 32 | 30 | 15 | 23 | 26 | 34 | 17 | 22 | 47 | 24 | 7 |
| Asian | 14 | 29 | 29 | 28 | 16 | 27 | 32 | 25 | 13 | 37 | 30 | 20 |
| Native Hawaiian or Other Pacific Islander | 13 | 43 | 31 | 13 | 12 | 40 | 36 | 12 | 19 | 48 | 23 | 10 |
| Filipino | 11 | 32 | 29 | 28 | 14 | 31 | 31 | 24 | 12 | 38 | 29 | 21 |
| Hispanic or Latino | 23 | 35 | 29 | 13 | 24 | 30 | 31 | 15 | 26 | 47 | 19 | 8 |
| Black or African American | 16 | 35 | 31 | 19 | 16 | 32 | 33 | 19 | 18 | 44 | 26 | 12 |
| White | 21 | 30 | 29 | 21 | 23 | 25 | 30 | 22 | 21 | 42 | 24 | 13 |
| Two or more races | 21 | 30 | 27 | 21 | 22 | 26 | 31 | 21 | 24 | 40 | 21 | 15 |
| No reported disabilities | 19 | 34 | 30 | 17 | 20 | 29 | 33 | 18 | 21 | 46 | 22 | 11 |
| Reported disabilities | 41 | 36 | 16 | 7 | 42 | 32 | 19 | 7 | 41 | 42 | 12 | 5 |
| Not economically disadvantaged | 19 | 27 | 29 | 24 | 20 | 24 | 31 | 25 | 20 | 39 | 25 | 16 |
| Economically disadvantaged | 22 | 36 | 29 | 14 | 23 | 31 | 31 | 15 | 24 | 47 | 20 | 9 |
| In US schools less than 12 months | 24 | 37 | 27 | 12 | 25 | 31 | 30 | 13 | 27 | 47 | 18 | 8 |
| In US schools 12 months or more | 7 | 24 | 36 | 33 | 8 | 21 | 37 | 33 | 7 | 38 | 33 | 22 |
| Duration unknown | 36 | 34 | 20 | 9 | 36 | 30 | 23 | 11 | 40 | 41 | 13 | 5 |
| Migrant education | 34 | 34 | 23 | 9 | 36 | 30 | 24 | 10 | 31 | 47 | 16 | 5 |
| Not migrant education | 21 | 34 | 29 | 16 | 22 | 29 | 31 | 17 | 23 | 45 | 21 | 10 |
| Armed forces family member | 14 | 33 | 33 | 20 | 15 | 27 | 36 | 22 | 18 | 44 | 24 | 13 |
| Not armed forces family member | 21 | 34 | 29 | 16 | 22 | 29 | 31 | 17 | 23 | 45 | 21 | 10 |
| Homeless | 34 | 34 | 23 | 8 | 36 | 29 | 25 | 10 | 34 | 46 | 15 | 5 |
| Not homeless | 20 | 34 | 29 | 17 | 21 | 29 | 32 | 18 | 23 | 45 | 21 | 11 |
| Foster youth | 22 | 36 | 30 | 12 | 21 | 30 | 36 | 13 | 30 | 44 | 19 | 7 |
| Not foster youth | 21 | 34 | 29 | 16 | 22 | 29 | 31 | 17 | 23 | 45 | 21 | 10 |
| American Indian or Alaska Native—Not economically disadvantaged | 22 | 30 | 30 | 18 | 23 | 24 | 33 | 20 | 22 | 38 | 30 | 10 |
| American Indian or Alaska Native—Economically disadvantaged | 23 | 33 | 30 | 13 | 23 | 26 | 34 | 16 | 22 | 51 | 21 | 6 |
| Asian—Not economically disadvantaged | 11 | 25 | 29 | 35 | 13 | 24 | 32 | 31 | 10 | 32 | 33 | 25 |
| Asian—Economically disadvantaged | 17 | 34 | 28 | 22 | 19 | 30 | 32 | 19 | 16 | 42 | 26 | 16 |
| Native Hawaiian or Other Pacific Islander—Not economically disadvantaged | 6 | 34 | 44 | 16 | 10 | 29 | 45 | 16 | 12 | 47 | 26 | 16 |
| Native Hawaiian or Other Pacific Islander—Economically disadvantaged | 15 | 46 | 27 | 12 | 13 | 43 | 32 | 11 | 21 | 49 | 22 | 8 |
| Filipino—Not economically disadvantaged | 9 | 33 | 28 | 30 | 11 | 33 | 32 | 24 | 10 | 38 | 30 | 22 |
| Filipino—Economically disadvantaged | 14 | 31 | 29 | 26 | 17 | 30 | 29 | 23 | 14 | 39 | 28 | 19 |
| Hispanic or Latino—Not economically disadvantaged | 25 | 30 | 29 | 16 | 25 | 26 | 30 | 19 | 28 | 44 | 19 | 9 |
| Hispanic or Latino—Economically disadvantaged | 22 | 36 | 29 | 13 | 23 | 31 | 31 | 15 | 25 | 48 | 19 | 8 |
| Black or African American—Not economically disadvantaged | 14 | 31 | 32 | 23 | 19 | 27 | 35 | 19 | 13 | 43 | 31 | 13 |
| Black or African American—Economically disadvantaged | 16 | 36 | 30 | 18 | 16 | 33 | 33 | 18 | 19 | 44 | 25 | 11 |
| White—Not economically disadvantaged | 18 | 22 | 31 | 30 | 19 | 19 | 30 | 32 | 18 | 37 | 28 | 17 |
| White—Economically disadvantaged | 23 | 34 | 28 | 15 | 25 | 29 | 30 | 16 | 22 | 45 | 22 | 10 |
| Two or more races—Not economically disadvantaged | 20 | 22 | 27 | 31 | 21 | 20 | 29 | 31 | 19 | 36 | 23 | 22 |
| Two or more races—Economically disadvantaged | 22 | 35 | 27 | 15 | 23 | 29 | 33 | 15 | 27 | 43 | 20 | 11 |

Table 7.E.2 Percentage of Students in Each Proficiency Level—Overall Assessment and Composites by Student Group, Grade One

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Student Group** | **Overall Proficiency Level 1** | **Overall Proficiency Level 2** | **Overall Proficiency Level 3** | **Overall Proficiency Level 4** | **Oral Language Proficiency Level 1** | **Oral Language Proficiency Level 2** | **Oral Language Proficiency Level 3** | **Oral Language Proficiency Level 4** | **Written Language Proficiency Level 1** | **Written Language Proficiency Level 2** | **Written Language Proficiency Level 3** | **Written Language Proficiency Level 4** |
| All | 24 | 37 | 31 | 7 | 16 | 28 | 37 | 18 | 39 | 33 | 23 | 5 |
| Male | 26 | 36 | 30 | 7 | 18 | 29 | 35 | 18 | 41 | 31 | 23 | 5 |
| Female | 22 | 38 | 32 | 7 | 15 | 28 | 39 | 18 | 37 | 35 | 23 | 5 |
| Nonbinary | 40 | 27 | 13 | 20 | 27 | 33 | 13 | 27 | 53 | 20 | 13 | 13 |
| American Indian or Alaska Native | 23 | 36 | 30 | 11 | 12 | 30 | 37 | 22 | 36 | 31 | 26 | 7 |
| Asian | 15 | 26 | 41 | 18 | 13 | 23 | 37 | 27 | 19 | 28 | 40 | 14 |
| Native Hawaiian or Other Pacific Islander | 29 | 37 | 27 | 6 | 19 | 35 | 37 | 10 | 42 | 32 | 20 | 7 |
| Filipino | 13 | 28 | 43 | 16 | 12 | 26 | 38 | 24 | 16 | 27 | 43 | 14 |
| Hispanic or Latino | 26 | 40 | 29 | 5 | 16 | 29 | 38 | 17 | 43 | 34 | 19 | 3 |
| Black or African American | 22 | 33 | 33 | 12 | 16 | 29 | 34 | 21 | 32 | 31 | 30 | 7 |
| White | 26 | 29 | 34 | 12 | 21 | 25 | 32 | 22 | 33 | 30 | 29 | 7 |
| Two or more races | 26 | 31 | 31 | 11 | 19 | 25 | 34 | 22 | 37 | 30 | 26 | 7 |
| No reported disabilities | 22 | 37 | 33 | 8 | 14 | 27 | 39 | 20 | 37 | 34 | 24 | 5 |
| Reported disabilities | 45 | 35 | 17 | 3 | 30 | 34 | 26 | 9 | 59 | 28 | 12 | 2 |
| Not economically disadvantaged | 22 | 27 | 36 | 15 | 18 | 21 | 35 | 27 | 31 | 28 | 31 | 10 |
| Economically disadvantaged | 25 | 39 | 30 | 6 | 16 | 30 | 38 | 17 | 41 | 34 | 21 | 4 |
| In US schools less than 12 months | 62 | 21 | 13 | 3 | 56 | 20 | 16 | 7 | 67 | 19 | 11 | 3 |
| In US schools 12 months or more | 21 | 39 | 33 | 8 | 12 | 29 | 39 | 19 | 37 | 34 | 24 | 5 |
| Duration unknown | 47 | 29 | 20 | 5 | 37 | 24 | 26 | 13 | 58 | 26 | 13 | 2 |
| Migrant education | 34 | 40 | 23 | 3 | 26 | 31 | 32 | 11 | 50 | 34 | 15 | 2 |
| Not migrant education | 24 | 37 | 31 | 7 | 16 | 28 | 37 | 19 | 39 | 33 | 23 | 5 |
| Armed forces family member | 19 | 39 | 34 | 8 | 11 | 30 | 41 | 19 | 36 | 33 | 26 | 5 |
| Not armed forces family member | 24 | 37 | 31 | 7 | 16 | 28 | 37 | 18 | 39 | 33 | 23 | 5 |
| Homeless | 38 | 36 | 22 | 3 | 28 | 30 | 30 | 12 | 53 | 30 | 14 | 2 |
| Not homeless | 24 | 37 | 32 | 8 | 15 | 28 | 38 | 19 | 39 | 33 | 23 | 5 |
| Foster youth | 21 | 48 | 28 | 3 | 10 | 32 | 45 | 12 | 47 | 35 | 17 | 1 |
| Not foster youth | 24 | 37 | 31 | 7 | 16 | 28 | 37 | 18 | 39 | 33 | 23 | 5 |
| American Indian or Alaska Native—Not economically disadvantaged | 13 | 23 | 47 | 17 | 10 | 23 | 37 | 30 | 13 | 27 | 47 | 13 |
| American Indian or Alaska Native—Economically disadvantaged | 25 | 39 | 26 | 10 | 12 | 31 | 37 | 20 | 41 | 32 | 22 | 6 |
| Asian—Not economically disadvantaged | 12 | 20 | 44 | 24 | 12 | 18 | 35 | 34 | 14 | 23 | 44 | 18 |
| Asian—Economically disadvantaged | 17 | 30 | 39 | 14 | 14 | 27 | 38 | 21 | 23 | 31 | 36 | 10 |
| Native Hawaiian or Other Pacific Islander—Not economically disadvantaged | 22 | 37 | 31 | 10 | 14 | 37 | 35 | 14 | 39 | 22 | 31 | 8 |
| Native Hawaiian or Other Pacific Islander—Economically disadvantaged | 31 | 38 | 26 | 5 | 20 | 34 | 37 | 9 | 43 | 34 | 17 | 6 |
| Filipino—Not economically disadvantaged | 12 | 25 | 44 | 20 | 13 | 23 | 35 | 28 | 14 | 25 | 44 | 17 |
| Filipino—Economically disadvantaged | 14 | 31 | 42 | 13 | 11 | 28 | 40 | 21 | 18 | 28 | 43 | 11 |
| Hispanic or Latino—Not economically disadvantaged | 28 | 33 | 31 | 8 | 21 | 23 | 36 | 21 | 43 | 31 | 22 | 4 |
| Hispanic or Latino—Economically disadvantaged | 26 | 41 | 29 | 5 | 16 | 30 | 38 | 16 | 43 | 35 | 19 | 3 |
| Black or African American—Not economically disadvantaged | 16 | 29 | 34 | 21 | 10 | 25 | 34 | 30 | 24 | 26 | 39 | 11 |
| Black or African American—Economically disadvantaged | 24 | 34 | 33 | 9 | 18 | 30 | 34 | 19 | 34 | 32 | 28 | 6 |
| White—Not economically disadvantaged | 21 | 23 | 38 | 18 | 19 | 19 | 31 | 32 | 27 | 28 | 34 | 11 |
| White—Economically disadvantaged | 28 | 32 | 32 | 8 | 22 | 27 | 33 | 18 | 36 | 32 | 26 | 6 |
| Two or more races—Not economically disadvantaged | 25 | 21 | 33 | 21 | 21 | 15 | 29 | 35 | 32 | 23 | 34 | 11 |
| Two or more races—Economically disadvantaged | 26 | 36 | 30 | 7 | 19 | 29 | 37 | 15 | 40 | 33 | 22 | 5 |

Table 7.E.3 Percentage of Students in Each Proficiency Level—Overall Assessment and Composites by Student Group, Grade Two

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Student Group** | **Overall Proficiency Level 1** | **Overall Proficiency Level 2** | **Overall Proficiency Level 3** | **Overall Proficiency Level 4** | **Oral Language Proficiency Level 1** | **Oral Language Proficiency Level 2** | **Oral Language Proficiency Level 3** | **Oral Language Proficiency Level 4** | **Written Language Proficiency Level 1** | **Written Language Proficiency Level 2** | **Written Language Proficiency Level 3** | **Written Language Proficiency Level 4** |
| All | 15 | 32 | 41 | 11 | 11 | 25 | 41 | 23 | 28 | 33 | 32 | 7 |
| Male | 17 | 32 | 40 | 11 | 12 | 26 | 39 | 24 | 30 | 33 | 31 | 7 |
| Female | 14 | 33 | 43 | 11 | 9 | 25 | 44 | 22 | 27 | 33 | 32 | 8 |
| Nonbinary | 45 | 9 | 45 | 0 | 18 | 36 | 36 | 9 | 45 | 18 | 36 | 0 |
| American Indian or Alaska Native | 20 | 33 | 40 | 7 | 16 | 28 | 41 | 16 | 31 | 30 | 31 | 7 |
| Asian | 11 | 21 | 46 | 22 | 11 | 20 | 39 | 31 | 14 | 25 | 44 | 17 |
| Native Hawaiian or Other Pacific Islander | 21 | 32 | 38 | 9 | 12 | 35 | 36 | 17 | 29 | 33 | 31 | 8 |
| Filipino | 7 | 25 | 51 | 17 | 7 | 23 | 46 | 24 | 10 | 26 | 50 | 14 |
| Hispanic or Latino | 16 | 35 | 41 | 9 | 10 | 26 | 42 | 22 | 31 | 35 | 29 | 5 |
| Black or African American | 12 | 26 | 49 | 13 | 9 | 21 | 43 | 26 | 20 | 33 | 40 | 7 |
| White | 18 | 25 | 42 | 15 | 16 | 21 | 36 | 27 | 25 | 31 | 35 | 9 |
| Two or more races | 19 | 28 | 40 | 12 | 16 | 22 | 37 | 25 | 30 | 29 | 32 | 9 |
| No reported disabilities | 13 | 31 | 44 | 12 | 9 | 24 | 42 | 25 | 25 | 33 | 34 | 8 |
| Reported disabilities | 32 | 39 | 25 | 4 | 21 | 35 | 32 | 12 | 48 | 32 | 17 | 2 |
| Not economically disadvantaged | 16 | 23 | 44 | 17 | 14 | 18 | 37 | 30 | 22 | 28 | 38 | 12 |
| Economically disadvantaged | 15 | 34 | 41 | 9 | 10 | 26 | 42 | 22 | 29 | 34 | 30 | 6 |
| In US schools less than 12 months | 62 | 19 | 15 | 4 | 60 | 17 | 15 | 7 | 64 | 20 | 13 | 3 |
| In US schools 12 months or more | 13 | 33 | 43 | 11 | 8 | 26 | 43 | 24 | 26 | 34 | 33 | 7 |
| Duration unknown | 35 | 27 | 32 | 6 | 28 | 24 | 31 | 17 | 44 | 29 | 22 | 5 |
| Migrant education | 25 | 37 | 32 | 5 | 18 | 29 | 37 | 16 | 42 | 33 | 22 | 3 |
| Not migrant education | 15 | 32 | 42 | 11 | 11 | 25 | 41 | 23 | 28 | 33 | 32 | 7 |
| Armed forces family member | 10 | 33 | 46 | 11 | 6 | 24 | 46 | 24 | 23 | 36 | 35 | 6 |
| Not armed forces family member | 16 | 32 | 41 | 11 | 11 | 25 | 41 | 23 | 28 | 33 | 32 | 7 |
| Homeless | 27 | 34 | 33 | 6 | 20 | 28 | 35 | 17 | 42 | 32 | 22 | 4 |
| Not homeless | 15 | 32 | 42 | 11 | 10 | 25 | 41 | 23 | 27 | 33 | 32 | 7 |
| Foster youth | 16 | 45 | 32 | 8 | 7 | 28 | 43 | 22 | 40 | 33 | 23 | 5 |
| Not foster youth | 15 | 32 | 41 | 11 | 11 | 25 | 41 | 23 | 28 | 33 | 32 | 7 |
| American Indian or Alaska Native—Not economically disadvantaged | 7 | 33 | 52 | 7 | 4 | 26 | 52 | 19 | 7 | 33 | 48 | 11 |
| American Indian or Alaska Native—Economically disadvantaged | 23 | 33 | 37 | 7 | 18 | 28 | 38 | 16 | 36 | 30 | 27 | 7 |
| Asian—Not economically disadvantaged | 11 | 17 | 46 | 26 | 12 | 16 | 37 | 35 | 12 | 22 | 46 | 21 |
| Asian—Economically disadvantaged | 11 | 24 | 46 | 19 | 10 | 22 | 40 | 28 | 16 | 27 | 43 | 14 |
| Native Hawaiian or Other Pacific Islander—Not economically disadvantaged | 8 | 32 | 44 | 16 | 2 | 30 | 40 | 28 | 18 | 36 | 34 | 12 |
| Native Hawaiian or Other Pacific Islander—Economically disadvantaged | 25 | 32 | 36 | 7 | 14 | 36 | 35 | 14 | 32 | 32 | 30 | 6 |
| Filipino—Not economically disadvantaged | 9 | 27 | 47 | 17 | 10 | 21 | 41 | 28 | 13 | 28 | 46 | 13 |
| Filipino—Economically disadvantaged | 5 | 24 | 54 | 17 | 5 | 25 | 49 | 21 | 8 | 24 | 53 | 16 |
| Hispanic or Latino—Not economically disadvantaged | 19 | 27 | 42 | 11 | 16 | 21 | 38 | 25 | 29 | 31 | 33 | 6 |
| Hispanic or Latino—Economically disadvantaged | 16 | 36 | 40 | 8 | 10 | 27 | 42 | 21 | 31 | 35 | 29 | 5 |
| Black or African American—Not economically disadvantaged | 8 | 23 | 45 | 23 | 10 | 15 | 44 | 31 | 15 | 31 | 47 | 7 |
| Black or African American—Economically disadvantaged | 13 | 27 | 50 | 10 | 9 | 23 | 43 | 24 | 21 | 34 | 38 | 7 |
| White—Not economically disadvantaged | 13 | 18 | 45 | 24 | 13 | 13 | 36 | 38 | 17 | 26 | 42 | 14 |
| White—Economically disadvantaged | 20 | 28 | 41 | 11 | 17 | 24 | 37 | 23 | 28 | 32 | 32 | 8 |
| Two or more races—Not economically disadvantaged | 17 | 19 | 45 | 18 | 18 | 15 | 31 | 37 | 22 | 27 | 39 | 13 |
| Two or more races—Economically disadvantaged | 20 | 32 | 38 | 10 | 15 | 25 | 39 | 20 | 34 | 31 | 29 | 7 |

Table 7.E.4 Percentage of Students in Each Proficiency Level—Overall Assessment and Composites by Student Group, Grade Three

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Student Group** | **Overall Proficiency Level 1** | **Overall Proficiency Level 2** | **Overall Proficiency Level 3** | **Overall Proficiency Level 4** | **Oral Language Proficiency Level 1** | **Oral Language Proficiency Level 2** | **Oral Language Proficiency Level 3** | **Oral Language Proficiency Level 4** | **Written Language Proficiency Level 1** | **Written Language Proficiency Level 2** | **Written Language Proficiency Level 3** | **Written Language Proficiency Level 4** |
| All | 18 | 34 | 35 | 13 | 14 | 17 | 36 | 33 | 34 | 40 | 22 | 5 |
| Male | 20 | 34 | 33 | 13 | 15 | 17 | 35 | 33 | 37 | 38 | 20 | 5 |
| Female | 17 | 34 | 36 | 13 | 13 | 17 | 37 | 33 | 31 | 41 | 23 | 5 |
| Nonbinary | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| American Indian or Alaska Native | 18 | 39 | 27 | 17 | 14 | 15 | 39 | 32 | 37 | 36 | 21 | 6 |
| Asian | 15 | 25 | 37 | 23 | 14 | 13 | 31 | 42 | 22 | 36 | 32 | 11 |
| Native Hawaiian or Other Pacific Islander | 24 | 35 | 32 | 8 | 23 | 20 | 33 | 24 | 37 | 40 | 21 | 2 |
| Filipino | 9 | 27 | 41 | 23 | 9 | 12 | 39 | 40 | 15 | 38 | 36 | 11 |
| Hispanic or Latino | 18 | 36 | 34 | 11 | 14 | 18 | 37 | 32 | 36 | 40 | 20 | 4 |
| Black or African American | 16 | 30 | 38 | 16 | 13 | 13 | 32 | 41 | 31 | 38 | 25 | 7 |
| White | 22 | 27 | 33 | 18 | 19 | 13 | 31 | 37 | 33 | 36 | 24 | 7 |
| Two or more races | 24 | 29 | 33 | 14 | 18 | 16 | 32 | 34 | 36 | 35 | 22 | 7 |
| No reported disabilities | 16 | 33 | 37 | 14 | 12 | 16 | 37 | 35 | 30 | 41 | 24 | 5 |
| Reported disabilities | 36 | 40 | 19 | 5 | 26 | 26 | 30 | 18 | 57 | 32 | 9 | 2 |
| Not economically disadvantaged | 18 | 26 | 36 | 19 | 16 | 12 | 32 | 40 | 29 | 36 | 28 | 8 |
| Economically disadvantaged | 18 | 36 | 34 | 12 | 14 | 18 | 37 | 32 | 35 | 40 | 21 | 4 |
| In US schools less than 12 months | 70 | 15 | 10 | 5 | 68 | 10 | 13 | 10 | 71 | 19 | 8 | 2 |
| In US schools 12 months or more | 16 | 35 | 36 | 13 | 11 | 17 | 37 | 34 | 32 | 41 | 23 | 5 |
| Duration unknown | 35 | 32 | 24 | 9 | 30 | 15 | 33 | 22 | 49 | 30 | 18 | 3 |
| Migrant education | 26 | 37 | 29 | 8 | 20 | 20 | 34 | 25 | 43 | 38 | 16 | 3 |
| Not migrant education | 18 | 34 | 35 | 13 | 14 | 17 | 36 | 33 | 34 | 40 | 22 | 5 |
| Armed forces family member | 14 | 33 | 37 | 16 | 10 | 16 | 35 | 40 | 29 | 41 | 24 | 6 |
| Not armed forces family member | 18 | 34 | 35 | 13 | 14 | 17 | 36 | 33 | 34 | 40 | 22 | 5 |
| Homeless | 29 | 35 | 28 | 9 | 24 | 18 | 33 | 25 | 46 | 35 | 16 | 3 |
| Not homeless | 18 | 34 | 35 | 13 | 13 | 17 | 36 | 34 | 33 | 40 | 22 | 5 |
| Foster youth | 29 | 40 | 24 | 7 | 17 | 24 | 32 | 26 | 50 | 36 | 12 | 2 |
| Not foster youth | 18 | 34 | 35 | 13 | 14 | 17 | 36 | 33 | 34 | 40 | 22 | 5 |
| American Indian or Alaska Native—Not economically disadvantaged | 30 | 30 | 30 | 11 | 26 | 11 | 37 | 26 | 48 | 30 | 22 | 0 |
| American Indian or Alaska Native—Economically disadvantaged | 14 | 41 | 26 | 18 | 11 | 16 | 39 | 34 | 34 | 38 | 21 | 8 |
| Asian—Not economically disadvantaged | 14 | 20 | 37 | 29 | 13 | 11 | 29 | 47 | 19 | 33 | 36 | 13 |
| Asian—Economically disadvantaged | 16 | 27 | 37 | 20 | 14 | 15 | 33 | 38 | 24 | 37 | 30 | 9 |
| Native Hawaiian or Other Pacific Islander—Not economically disadvantaged | 14 | 29 | 49 | 8 | 18 | 12 | 31 | 39 | 27 | 41 | 33 | 0 |
| Native Hawaiian or Other Pacific Islander—Economically disadvantaged | 26 | 37 | 29 | 8 | 24 | 22 | 33 | 21 | 39 | 40 | 19 | 2 |
| Filipino—Not economically disadvantaged | 9 | 25 | 42 | 23 | 10 | 12 | 41 | 38 | 15 | 36 | 38 | 11 |
| Filipino—Economically disadvantaged | 9 | 27 | 41 | 23 | 9 | 12 | 38 | 41 | 15 | 40 | 34 | 11 |
| Hispanic or Latino—Not economically disadvantaged | 21 | 31 | 35 | 13 | 18 | 14 | 34 | 34 | 35 | 38 | 23 | 5 |
| Hispanic or Latino—Economically disadvantaged | 18 | 37 | 34 | 11 | 13 | 18 | 38 | 31 | 36 | 41 | 20 | 4 |
| Black or African American—Not economically disadvantaged | 14 | 20 | 39 | 27 | 13 | 12 | 24 | 52 | 24 | 38 | 29 | 9 |
| Black or African American—Economically disadvantaged | 17 | 32 | 38 | 14 | 13 | 14 | 35 | 38 | 32 | 38 | 24 | 6 |
| White—Not economically disadvantaged | 16 | 21 | 37 | 26 | 15 | 9 | 28 | 48 | 25 | 35 | 31 | 10 |
| White—Economically disadvantaged | 24 | 29 | 32 | 15 | 21 | 15 | 32 | 33 | 36 | 36 | 22 | 6 |
| Two or more races—Not economically disadvantaged | 23 | 20 | 34 | 22 | 20 | 9 | 28 | 43 | 31 | 31 | 29 | 9 |
| Two or more races—Economically disadvantaged | 24 | 32 | 33 | 11 | 18 | 18 | 33 | 31 | 38 | 37 | 19 | 6 |

Table 7.E.5 Percentage of Students in Each Proficiency Level—Overall Assessment and Composites by Student Group, Grade Four

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Student Group** | **Overall Proficiency Level 1** | **Overall Proficiency Level 2** | **Overall Proficiency Level 3** | **Overall Proficiency Level 4** | **Oral Language Proficiency Level 1** | **Oral Language Proficiency Level 2** | **Oral Language Proficiency Level 3** | **Oral Language Proficiency Level 4** | **Written Language Proficiency Level 1** | **Written Language Proficiency Level 2** | **Written Language Proficiency Level 3** | **Written Language Proficiency Level 4** |
| All | 15 | 27 | 39 | 19 | 10 | 12 | 35 | 43 | 32 | 34 | 27 | 7 |
| Male | 16 | 27 | 37 | 19 | 11 | 12 | 34 | 44 | 35 | 33 | 25 | 7 |
| Female | 13 | 27 | 41 | 19 | 9 | 11 | 36 | 43 | 29 | 35 | 29 | 7 |
| Nonbinary | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| American Indian or Alaska Native | 12 | 29 | 35 | 23 | 6 | 6 | 40 | 47 | 32 | 40 | 23 | 5 |
| Asian | 14 | 19 | 36 | 31 | 12 | 10 | 28 | 51 | 23 | 29 | 34 | 14 |
| Native Hawaiian or Other Pacific Islander | 18 | 28 | 39 | 15 | 12 | 17 | 36 | 35 | 38 | 32 | 23 | 8 |
| Filipino | 7 | 22 | 45 | 26 | 6 | 10 | 38 | 46 | 14 | 36 | 37 | 13 |
| Hispanic or Latino | 15 | 29 | 40 | 17 | 9 | 12 | 36 | 42 | 33 | 35 | 26 | 6 |
| Black or African American | 13 | 25 | 39 | 22 | 11 | 8 | 35 | 47 | 29 | 33 | 30 | 7 |
| White | 21 | 21 | 36 | 23 | 17 | 10 | 27 | 47 | 34 | 30 | 27 | 9 |
| Two or more races | 20 | 23 | 34 | 23 | 16 | 11 | 28 | 45 | 35 | 30 | 26 | 9 |
| No reported disabilities | 12 | 25 | 42 | 21 | 9 | 10 | 35 | 47 | 27 | 35 | 30 | 8 |
| Reported disabilities | 30 | 39 | 24 | 7 | 17 | 22 | 36 | 25 | 60 | 27 | 11 | 2 |
| Not economically disadvantaged | 17 | 20 | 37 | 25 | 15 | 9 | 28 | 48 | 29 | 31 | 30 | 10 |
| Economically disadvantaged | 14 | 28 | 40 | 18 | 9 | 12 | 36 | 43 | 33 | 34 | 27 | 6 |
| In US schools less than 12 months | 71 | 14 | 11 | 4 | 68 | 10 | 12 | 10 | 76 | 15 | 7 | 1 |
| In US schools 12 months or more | 12 | 28 | 41 | 20 | 7 | 12 | 36 | 45 | 30 | 35 | 28 | 7 |
| Duration unknown | 34 | 21 | 30 | 14 | 30 | 9 | 27 | 33 | 50 | 26 | 20 | 4 |
| Migrant education | 21 | 28 | 36 | 15 | 15 | 14 | 36 | 36 | 39 | 33 | 23 | 6 |
| Not migrant education | 15 | 27 | 39 | 19 | 10 | 12 | 35 | 44 | 32 | 34 | 27 | 7 |
| Armed forces family member | 9 | 27 | 42 | 22 | 6 | 10 | 35 | 50 | 27 | 35 | 31 | 8 |
| Not armed forces family member | 15 | 27 | 39 | 19 | 10 | 12 | 35 | 43 | 32 | 34 | 27 | 7 |
| Homeless | 25 | 27 | 33 | 14 | 20 | 12 | 32 | 36 | 44 | 30 | 22 | 4 |
| Not homeless | 14 | 27 | 40 | 19 | 9 | 12 | 35 | 44 | 31 | 34 | 27 | 7 |
| Foster youth | 20 | 31 | 36 | 13 | 9 | 16 | 37 | 39 | 43 | 34 | 16 | 7 |
| Not foster youth | 15 | 27 | 39 | 19 | 10 | 12 | 35 | 43 | 32 | 34 | 27 | 7 |
| American Indian or Alaska Native—Not economically disadvantaged | 14 | 25 | 36 | 25 | 11 | 4 | 36 | 50 | 25 | 43 | 25 | 7 |
| American Indian or Alaska Native—Economically disadvantaged | 12 | 30 | 35 | 23 | 5 | 7 | 42 | 46 | 34 | 39 | 23 | 4 |
| Asian—Not economically disadvantaged | 14 | 16 | 35 | 35 | 12 | 9 | 25 | 54 | 20 | 28 | 35 | 16 |
| Asian—Economically disadvantaged | 14 | 20 | 37 | 28 | 11 | 11 | 29 | 49 | 25 | 30 | 33 | 13 |
| Native Hawaiian or Other Pacific Islander—Not economically disadvantaged | 6 | 23 | 53 | 19 | 8 | 13 | 28 | 51 | 19 | 45 | 21 | 15 |
| Native Hawaiian or Other Pacific Islander—Economically disadvantaged | 21 | 29 | 36 | 14 | 13 | 18 | 38 | 31 | 43 | 28 | 23 | 6 |
| Filipino—Not economically disadvantaged | 7 | 20 | 46 | 27 | 6 | 10 | 37 | 47 | 15 | 35 | 36 | 15 |
| Filipino—Economically disadvantaged | 7 | 23 | 44 | 25 | 6 | 11 | 39 | 45 | 14 | 36 | 37 | 13 |
| Hispanic or Latino—Not economically disadvantaged | 19 | 24 | 38 | 20 | 15 | 9 | 31 | 44 | 33 | 33 | 27 | 7 |
| Hispanic or Latino—Economically disadvantaged | 14 | 29 | 40 | 17 | 9 | 12 | 37 | 42 | 33 | 35 | 26 | 6 |
| Black or African American—Not economically disadvantaged | 21 | 15 | 43 | 21 | 16 | 5 | 34 | 45 | 31 | 31 | 29 | 8 |
| Black or African American—Economically disadvantaged | 11 | 28 | 38 | 23 | 9 | 8 | 35 | 47 | 29 | 34 | 31 | 7 |
| White—Not economically disadvantaged | 19 | 15 | 34 | 32 | 17 | 6 | 21 | 56 | 27 | 28 | 32 | 13 |
| White—Economically disadvantaged | 21 | 23 | 36 | 20 | 17 | 11 | 29 | 44 | 36 | 30 | 26 | 8 |
| Two or more races—Not economically disadvantaged | 24 | 14 | 32 | 31 | 21 | 9 | 19 | 52 | 32 | 25 | 31 | 13 |
| Two or more races—Economically disadvantaged | 19 | 27 | 35 | 20 | 13 | 12 | 32 | 43 | 36 | 32 | 24 | 7 |

Table 7.E.6 Percentage of Students in Each Proficiency Level—Overall Assessment and Composites by Student Group, Grade Five

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Student Group** | **Overall Proficiency Level 1** | **Overall Proficiency Level 2** | **Overall Proficiency Level 3** | **Overall Proficiency Level 4** | **Oral Language Proficiency Level 1** | **Oral Language Proficiency Level 2** | **Oral Language Proficiency Level 3** | **Oral Language Proficiency Level 4** | **Written Language Proficiency Level 1** | **Written Language Proficiency Level 2** | **Written Language Proficiency Level 3** | **Written Language Proficiency Level 4** |
| All | 13 | 26 | 37 | 24 | 9 | 8 | 41 | 41 | 26 | 44 | 19 | 11 |
| Male | 14 | 27 | 35 | 24 | 10 | 9 | 40 | 41 | 29 | 43 | 18 | 10 |
| Female | 11 | 25 | 39 | 25 | 9 | 8 | 43 | 41 | 22 | 45 | 21 | 11 |
| Nonbinary | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| American Indian or Alaska Native | 14 | 28 | 40 | 18 | 11 | 9 | 41 | 39 | 29 | 46 | 16 | 9 |
| Asian | 15 | 18 | 32 | 35 | 12 | 8 | 33 | 48 | 22 | 36 | 24 | 18 |
| Native Hawaiian or Other Pacific Islander | 17 | 34 | 27 | 23 | 14 | 11 | 41 | 35 | 31 | 42 | 18 | 8 |
| Filipino | 8 | 20 | 42 | 30 | 6 | 8 | 40 | 46 | 13 | 46 | 26 | 15 |
| Hispanic or Latino | 12 | 27 | 38 | 23 | 9 | 8 | 43 | 40 | 26 | 45 | 19 | 10 |
| Black or African American | 17 | 21 | 35 | 27 | 11 | 11 | 36 | 42 | 28 | 41 | 19 | 12 |
| White | 20 | 21 | 30 | 29 | 17 | 8 | 32 | 43 | 31 | 37 | 19 | 13 |
| Two or more races | 18 | 24 | 32 | 26 | 15 | 8 | 34 | 43 | 29 | 42 | 18 | 11 |
| No reported disabilities | 11 | 23 | 39 | 27 | 9 | 7 | 40 | 44 | 21 | 45 | 22 | 12 |
| Reported disabilities | 23 | 43 | 25 | 9 | 13 | 17 | 46 | 24 | 52 | 37 | 7 | 3 |
| Not economically disadvantaged | 17 | 20 | 34 | 29 | 14 | 7 | 35 | 44 | 25 | 40 | 22 | 14 |
| Economically disadvantaged | 12 | 27 | 37 | 24 | 9 | 9 | 42 | 41 | 26 | 45 | 19 | 10 |
| In US schools less than 12 months | 72 | 14 | 9 | 5 | 69 | 8 | 14 | 9 | 76 | 17 | 5 | 2 |
| In US schools 12 months or more | 10 | 27 | 38 | 25 | 6 | 8 | 43 | 43 | 23 | 46 | 20 | 11 |
| Duration unknown | 30 | 26 | 28 | 16 | 27 | 8 | 34 | 31 | 44 | 39 | 10 | 7 |
| Migrant education | 20 | 28 | 33 | 19 | 16 | 10 | 41 | 34 | 34 | 42 | 17 | 7 |
| Not migrant education | 13 | 26 | 37 | 24 | 9 | 8 | 41 | 41 | 26 | 44 | 20 | 11 |
| Armed forces family member | 7 | 23 | 40 | 30 | 4 | 8 | 39 | 49 | 20 | 44 | 23 | 13 |
| Not armed forces family member | 13 | 26 | 37 | 24 | 9 | 8 | 41 | 41 | 26 | 44 | 19 | 11 |
| Homeless | 24 | 27 | 30 | 19 | 19 | 10 | 38 | 33 | 38 | 39 | 15 | 8 |
| Not homeless | 12 | 26 | 37 | 25 | 9 | 8 | 42 | 42 | 25 | 44 | 20 | 11 |
| Foster youth | 15 | 30 | 35 | 20 | 7 | 13 | 40 | 39 | 33 | 43 | 16 | 8 |
| Not foster youth | 13 | 26 | 37 | 24 | 9 | 8 | 41 | 41 | 26 | 44 | 19 | 11 |
| American Indian or Alaska Native—Not economically disadvantaged | 8 | 17 | 42 | 33 | 8 | 0 | 33 | 58 | 25 | 50 | 0 | 25 |
| American Indian or Alaska Native—Economically disadvantaged | 15 | 29 | 40 | 17 | 11 | 10 | 42 | 37 | 30 | 45 | 18 | 7 |
| Asian—Not economically disadvantaged | 15 | 16 | 31 | 39 | 13 | 7 | 30 | 50 | 20 | 35 | 25 | 21 |
| Asian—Economically disadvantaged | 14 | 20 | 33 | 33 | 12 | 8 | 34 | 46 | 23 | 37 | 23 | 17 |
| Native Hawaiian or Other Pacific Islander—Not economically disadvantaged | 18 | 21 | 25 | 36 | 14 | 9 | 32 | 45 | 27 | 39 | 20 | 14 |
| Native Hawaiian or Other Pacific Islander—Economically disadvantaged | 17 | 37 | 27 | 19 | 13 | 11 | 43 | 32 | 33 | 42 | 18 | 7 |
| Filipino—Not economically disadvantaged | 10 | 21 | 41 | 28 | 8 | 8 | 41 | 43 | 16 | 43 | 26 | 15 |
| Filipino—Economically disadvantaged | 6 | 20 | 43 | 31 | 4 | 8 | 39 | 48 | 10 | 49 | 27 | 15 |
| Hispanic or Latino—Not economically disadvantaged | 17 | 22 | 36 | 25 | 14 | 7 | 38 | 41 | 27 | 42 | 20 | 10 |
| Hispanic or Latino—Economically disadvantaged | 12 | 28 | 38 | 23 | 8 | 9 | 43 | 40 | 26 | 46 | 19 | 10 |
| Black or African American—Not economically disadvantaged | 12 | 24 | 38 | 26 | 7 | 12 | 43 | 38 | 25 | 49 | 14 | 12 |
| Black or African American—Economically disadvantaged | 18 | 20 | 34 | 28 | 12 | 11 | 34 | 43 | 28 | 38 | 21 | 13 |
| White—Not economically disadvantaged | 20 | 17 | 29 | 35 | 18 | 6 | 29 | 48 | 27 | 35 | 21 | 18 |
| White—Economically disadvantaged | 20 | 23 | 30 | 27 | 17 | 9 | 33 | 41 | 32 | 38 | 18 | 12 |
| Two or more races—Not economically disadvantaged | 21 | 18 | 29 | 32 | 19 | 6 | 26 | 49 | 27 | 38 | 20 | 15 |
| Two or more races—Economically disadvantaged | 18 | 25 | 34 | 24 | 14 | 8 | 36 | 42 | 30 | 43 | 17 | 9 |

Table 7.E.7 Percentage of Students in Each Proficiency Level—Overall Assessment and Composites by Student Group, Grade Six

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Student Group** | **Overall Proficiency Level 1** | **Overall Proficiency Level 2** | **Overall Proficiency Level 3** | **Overall Proficiency Level 4** | **Oral Language Proficiency Level 1** | **Oral Language Proficiency Level 2** | **Oral Language Proficiency Level 3** | **Oral Language Proficiency Level 4** | **Written Language Proficiency Level 1** | **Written Language Proficiency Level 2** | **Written Language Proficiency Level 3** | **Written Language Proficiency Level 4** |
| All | 16 | 25 | 38 | 21 | 11 | 12 | 35 | 42 | 30 | 38 | 23 | 8 |
| Male | 17 | 25 | 36 | 21 | 11 | 12 | 33 | 44 | 35 | 38 | 20 | 7 |
| Female | 14 | 25 | 39 | 22 | 11 | 12 | 37 | 40 | 25 | 38 | 27 | 9 |
| Nonbinary | 13 | 40 | 27 | 20 | 7 | 13 | 40 | 40 | 47 | 33 | 13 | 7 |
| American Indian or Alaska Native | 18 | 29 | 40 | 13 | 14 | 15 | 40 | 32 | 32 | 39 | 25 | 4 |
| Asian | 18 | 19 | 32 | 30 | 15 | 10 | 27 | 49 | 27 | 34 | 26 | 13 |
| Native Hawaiian or Other Pacific Islander | 19 | 25 | 41 | 16 | 11 | 17 | 36 | 37 | 31 | 44 | 19 | 6 |
| Filipino | 6 | 21 | 41 | 31 | 5 | 10 | 32 | 53 | 14 | 40 | 31 | 14 |
| Hispanic or Latino | 15 | 26 | 39 | 20 | 10 | 12 | 36 | 41 | 30 | 39 | 23 | 7 |
| Black or African American | 16 | 21 | 38 | 25 | 10 | 11 | 28 | 51 | 31 | 36 | 24 | 9 |
| White | 23 | 21 | 32 | 24 | 19 | 10 | 29 | 42 | 35 | 33 | 22 | 10 |
| Two or more races | 22 | 20 | 34 | 24 | 18 | 11 | 31 | 41 | 33 | 36 | 22 | 9 |
| No reported disabilities | 13 | 22 | 40 | 24 | 10 | 10 | 34 | 46 | 25 | 39 | 26 | 9 |
| Reported disabilities | 27 | 38 | 26 | 8 | 13 | 23 | 39 | 25 | 55 | 34 | 10 | 2 |
| Not economically disadvantaged | 20 | 20 | 34 | 26 | 16 | 10 | 30 | 44 | 31 | 34 | 24 | 11 |
| Economically disadvantaged | 15 | 26 | 38 | 21 | 10 | 12 | 36 | 42 | 30 | 39 | 23 | 8 |
| In US schools less than 12 months | 71 | 13 | 10 | 6 | 67 | 10 | 13 | 10 | 76 | 15 | 6 | 3 |
| In US schools 12 months or more | 13 | 26 | 39 | 22 | 7 | 12 | 36 | 44 | 28 | 40 | 24 | 8 |
| Duration unknown | 33 | 24 | 32 | 10 | 28 | 12 | 33 | 27 | 47 | 36 | 14 | 3 |
| Migrant education | 23 | 24 | 35 | 18 | 18 | 13 | 34 | 35 | 35 | 36 | 21 | 7 |
| Not migrant education | 16 | 25 | 38 | 21 | 11 | 12 | 35 | 42 | 30 | 38 | 23 | 8 |
| Armed forces family member | 10 | 26 | 41 | 23 | 5 | 13 | 35 | 47 | 27 | 41 | 24 | 8 |
| Not armed forces family member | 16 | 25 | 38 | 21 | 11 | 12 | 35 | 42 | 30 | 38 | 23 | 8 |
| Homeless | 26 | 25 | 32 | 17 | 20 | 13 | 33 | 34 | 40 | 34 | 20 | 6 |
| Not homeless | 15 | 25 | 38 | 21 | 10 | 12 | 35 | 43 | 30 | 39 | 24 | 8 |
| Foster youth | 25 | 25 | 33 | 17 | 13 | 17 | 33 | 37 | 43 | 31 | 20 | 6 |
| Not foster youth | 16 | 25 | 38 | 21 | 11 | 12 | 35 | 42 | 30 | 38 | 23 | 8 |
| American Indian or Alaska Native—Not economically disadvantaged | 33 | 13 | 53 | 0 | 13 | 20 | 40 | 27 | 33 | 47 | 20 | 0 |
| American Indian or Alaska Native—Economically disadvantaged | 16 | 32 | 38 | 15 | 14 | 14 | 40 | 33 | 32 | 38 | 26 | 5 |
| Asian—Not economically disadvantaged | 19 | 17 | 30 | 35 | 16 | 9 | 25 | 50 | 26 | 31 | 26 | 17 |
| Asian—Economically disadvantaged | 18 | 20 | 33 | 28 | 14 | 11 | 27 | 48 | 28 | 35 | 25 | 12 |
| Native Hawaiian or Other Pacific Islander—Not economically disadvantaged | 10 | 28 | 46 | 16 | 4 | 10 | 46 | 40 | 22 | 54 | 20 | 4 |
| Native Hawaiian or Other Pacific Islander—Economically disadvantaged | 21 | 24 | 39 | 16 | 12 | 18 | 33 | 36 | 33 | 41 | 19 | 6 |
| Filipino—Not economically disadvantaged | 9 | 21 | 40 | 30 | 6 | 11 | 29 | 53 | 16 | 38 | 32 | 14 |
| Filipino—Economically disadvantaged | 5 | 22 | 42 | 32 | 4 | 9 | 34 | 53 | 12 | 42 | 31 | 14 |
| Hispanic or Latino—Not economically disadvantaged | 21 | 22 | 36 | 22 | 16 | 10 | 32 | 42 | 33 | 35 | 24 | 8 |
| Hispanic or Latino—Economically disadvantaged | 15 | 27 | 39 | 20 | 9 | 13 | 37 | 41 | 30 | 40 | 23 | 7 |
| Black or African American—Not economically disadvantaged | 16 | 20 | 38 | 26 | 13 | 8 | 26 | 54 | 28 | 38 | 25 | 10 |
| Black or African American—Economically disadvantaged | 16 | 21 | 38 | 25 | 9 | 12 | 29 | 50 | 33 | 35 | 24 | 8 |
| White—Not economically disadvantaged | 23 | 17 | 30 | 30 | 18 | 9 | 26 | 47 | 33 | 31 | 23 | 13 |
| White—Economically disadvantaged | 23 | 22 | 32 | 23 | 19 | 11 | 30 | 41 | 36 | 33 | 22 | 9 |
| Two or more races—Not economically disadvantaged | 29 | 12 | 35 | 24 | 26 | 8 | 24 | 42 | 35 | 32 | 23 | 10 |
| Two or more races—Economically disadvantaged | 20 | 22 | 34 | 24 | 15 | 12 | 33 | 41 | 32 | 37 | 22 | 8 |

Table 7.E.8 Percentage of Students in Each Proficiency Level—Overall Assessment and Composites by Student Group, Grade Seven

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Student Group** | **Overall Proficiency Level 1** | **Overall Proficiency Level 2** | **Overall Proficiency Level 3** | **Overall Proficiency Level 4** | **Oral Language Proficiency Level 1** | **Oral Language Proficiency Level 2** | **Oral Language Proficiency Level 3** | **Oral Language Proficiency Level 4** | **Written Language Proficiency Level 1** | **Written Language Proficiency Level 2** | **Written Language Proficiency Level 3** | **Written Language Proficiency Level 4** |
| All | 16 | 25 | 33 | 26 | 13 | 12 | 36 | 40 | 29 | 35 | 26 | 10 |
| Male | 17 | 25 | 32 | 25 | 13 | 12 | 34 | 41 | 34 | 35 | 23 | 8 |
| Female | 15 | 24 | 34 | 26 | 13 | 12 | 37 | 38 | 25 | 35 | 29 | 12 |
| Nonbinary | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| American Indian or Alaska Native | 22 | 29 | 32 | 17 | 15 | 16 | 35 | 33 | 37 | 32 | 28 | 3 |
| Asian | 18 | 19 | 28 | 35 | 16 | 11 | 27 | 47 | 26 | 29 | 28 | 16 |
| Native Hawaiian or Other Pacific Islander | 17 | 31 | 29 | 24 | 11 | 16 | 36 | 37 | 31 | 38 | 22 | 10 |
| Filipino | 6 | 20 | 41 | 34 | 4 | 10 | 37 | 49 | 12 | 37 | 34 | 16 |
| Hispanic or Latino | 16 | 26 | 34 | 25 | 12 | 12 | 37 | 39 | 30 | 36 | 26 | 9 |
| Black or African American | 22 | 24 | 27 | 27 | 16 | 12 | 32 | 40 | 34 | 33 | 23 | 10 |
| White | 24 | 21 | 27 | 28 | 20 | 11 | 29 | 39 | 33 | 30 | 25 | 12 |
| Two or more races | 24 | 27 | 24 | 25 | 20 | 13 | 31 | 36 | 40 | 28 | 21 | 11 |
| No reported disabilities | 15 | 21 | 35 | 29 | 13 | 9 | 34 | 43 | 25 | 35 | 29 | 12 |
| Reported disabilities | 23 | 40 | 27 | 11 | 12 | 22 | 41 | 24 | 49 | 35 | 13 | 3 |
| Not economically disadvantaged | 22 | 20 | 28 | 30 | 19 | 10 | 29 | 42 | 32 | 30 | 25 | 13 |
| Economically disadvantaged | 16 | 25 | 34 | 25 | 12 | 12 | 37 | 40 | 29 | 35 | 26 | 9 |
| In US schools less than 12 months | 73 | 13 | 9 | 5 | 71 | 9 | 11 | 8 | 76 | 14 | 7 | 3 |
| In US schools 12 months or more | 12 | 26 | 35 | 27 | 9 | 12 | 37 | 42 | 26 | 36 | 27 | 10 |
| Duration unknown | 42 | 23 | 21 | 14 | 38 | 12 | 27 | 24 | 53 | 27 | 15 | 6 |
| Migrant education | 26 | 23 | 30 | 22 | 22 | 12 | 33 | 33 | 37 | 31 | 24 | 8 |
| Not migrant education | 16 | 25 | 33 | 26 | 13 | 12 | 36 | 40 | 29 | 35 | 26 | 10 |
| Armed forces family member | 12 | 25 | 34 | 30 | 9 | 11 | 37 | 44 | 27 | 31 | 29 | 13 |
| Not armed forces family member | 16 | 25 | 33 | 26 | 13 | 12 | 36 | 40 | 29 | 35 | 26 | 10 |
| Homeless | 31 | 22 | 27 | 20 | 27 | 12 | 30 | 30 | 43 | 29 | 21 | 8 |
| Not homeless | 15 | 25 | 34 | 26 | 12 | 12 | 36 | 41 | 29 | 35 | 26 | 10 |
| Foster youth | 20 | 36 | 25 | 20 | 13 | 17 | 37 | 34 | 40 | 34 | 22 | 5 |
| Not foster youth | 16 | 25 | 33 | 26 | 13 | 12 | 36 | 40 | 29 | 35 | 26 | 10 |
| American Indian or Alaska Native—Not economically disadvantaged | 38 | 13 | 31 | 19 | 25 | 13 | 25 | 38 | 44 | 25 | 31 | 0 |
| American Indian or Alaska Native—Economically disadvantaged | 18 | 32 | 32 | 17 | 13 | 17 | 38 | 32 | 35 | 34 | 27 | 4 |
| Asian—Not economically disadvantaged | 19 | 18 | 25 | 38 | 17 | 10 | 24 | 49 | 26 | 27 | 28 | 19 |
| Asian—Economically disadvantaged | 18 | 20 | 30 | 33 | 15 | 11 | 29 | 45 | 26 | 30 | 28 | 15 |
| Native Hawaiian or Other Pacific Islander—Not economically disadvantaged | 16 | 27 | 39 | 18 | 7 | 25 | 25 | 43 | 27 | 45 | 18 | 9 |
| Native Hawaiian or Other Pacific Islander—Economically disadvantaged | 17 | 32 | 26 | 25 | 12 | 14 | 39 | 35 | 31 | 36 | 23 | 10 |
| Filipino—Not economically disadvantaged | 6 | 22 | 38 | 35 | 4 | 10 | 38 | 48 | 13 | 37 | 33 | 17 |
| Filipino—Economically disadvantaged | 6 | 19 | 43 | 33 | 5 | 10 | 37 | 49 | 12 | 37 | 35 | 16 |
| Hispanic or Latino—Not economically disadvantaged | 23 | 22 | 29 | 26 | 20 | 10 | 31 | 39 | 35 | 31 | 24 | 11 |
| Hispanic or Latino—Economically disadvantaged | 15 | 26 | 35 | 24 | 11 | 12 | 38 | 39 | 29 | 36 | 26 | 9 |
| Black or African American—Not economically disadvantaged | 22 | 25 | 23 | 30 | 14 | 14 | 32 | 39 | 32 | 29 | 28 | 12 |
| Black or African American—Economically disadvantaged | 22 | 24 | 28 | 26 | 16 | 11 | 32 | 40 | 34 | 35 | 22 | 9 |
| White—Not economically disadvantaged | 26 | 16 | 26 | 32 | 23 | 9 | 22 | 46 | 33 | 27 | 25 | 16 |
| White—Economically disadvantaged | 23 | 23 | 27 | 27 | 19 | 12 | 31 | 37 | 34 | 31 | 25 | 11 |
| Two or more races—Not economically disadvantaged | 30 | 24 | 19 | 29 | 27 | 12 | 24 | 38 | 45 | 23 | 19 | 14 |
| Two or more races—Economically disadvantaged | 21 | 29 | 27 | 23 | 17 | 14 | 34 | 36 | 38 | 30 | 22 | 10 |

Table 7.E.9 Percentage of Students in Each Proficiency Level—Overall Assessment and Composites by Student Group, Grade Eight

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Student Group** | **Overall Proficiency Level 1** | **Overall Proficiency Level 2** | **Overall Proficiency Level 3** | **Overall Proficiency Level 4** | **Oral Language Proficiency Level 1** | **Oral Language Proficiency Level 2** | **Oral Language Proficiency Level 3** | **Oral Language Proficiency Level 4** | **Written Language Proficiency Level 1** | **Written Language Proficiency Level 2** | **Written Language Proficiency Level 3** | **Written Language Proficiency Level 4** |
| All | 16 | 22 | 36 | 26 | 13 | 13 | 32 | 41 | 28 | 32 | 29 | 11 |
| Male | 17 | 23 | 34 | 25 | 13 | 13 | 31 | 42 | 31 | 32 | 27 | 10 |
| Female | 15 | 21 | 37 | 27 | 13 | 14 | 33 | 40 | 23 | 32 | 32 | 13 |
| Nonbinary | 0 | 17 | 58 | 25 | 0 | 8 | 8 | 83 | 17 | 42 | 33 | 8 |
| American Indian or Alaska Native | 19 | 17 | 47 | 17 | 16 | 6 | 42 | 36 | 31 | 40 | 21 | 8 |
| Asian | 19 | 19 | 30 | 32 | 17 | 13 | 27 | 44 | 26 | 29 | 30 | 15 |
| Native Hawaiian or Other Pacific Islander | 16 | 30 | 35 | 20 | 10 | 22 | 36 | 33 | 28 | 37 | 28 | 7 |
| Filipino | 6 | 22 | 41 | 32 | 4 | 12 | 36 | 47 | 14 | 33 | 37 | 16 |
| Hispanic or Latino | 16 | 22 | 36 | 25 | 13 | 14 | 33 | 41 | 28 | 32 | 29 | 10 |
| Black or African American | 17 | 20 | 35 | 29 | 14 | 11 | 29 | 46 | 29 | 30 | 32 | 9 |
| White | 23 | 19 | 29 | 28 | 20 | 14 | 25 | 41 | 32 | 27 | 27 | 13 |
| Two or more races | 24 | 19 | 31 | 26 | 20 | 14 | 24 | 42 | 36 | 30 | 25 | 9 |
| No reported disabilities | 16 | 18 | 37 | 29 | 14 | 11 | 31 | 44 | 24 | 31 | 32 | 13 |
| Reported disabilities | 20 | 37 | 31 | 12 | 11 | 24 | 37 | 27 | 43 | 36 | 17 | 4 |
| Not economically disadvantaged | 22 | 20 | 31 | 28 | 20 | 12 | 28 | 40 | 31 | 28 | 27 | 13 |
| Economically disadvantaged | 16 | 22 | 36 | 26 | 12 | 14 | 33 | 41 | 27 | 33 | 29 | 11 |
| In US schools less than 12 months | 73 | 14 | 9 | 4 | 71 | 12 | 10 | 6 | 76 | 15 | 7 | 2 |
| In US schools 12 months or more | 13 | 23 | 37 | 27 | 9 | 14 | 33 | 44 | 25 | 33 | 31 | 12 |
| Duration unknown | 40 | 20 | 25 | 15 | 38 | 12 | 22 | 28 | 49 | 29 | 17 | 6 |
| Migrant education | 27 | 20 | 30 | 23 | 25 | 13 | 27 | 36 | 36 | 28 | 26 | 10 |
| Not migrant education | 16 | 22 | 36 | 26 | 13 | 14 | 32 | 41 | 28 | 32 | 29 | 11 |
| Armed forces family member | 11 | 23 | 37 | 29 | 7 | 14 | 35 | 44 | 25 | 32 | 31 | 13 |
| Not armed forces family member | 17 | 22 | 36 | 26 | 13 | 13 | 32 | 41 | 28 | 32 | 29 | 11 |
| Homeless | 31 | 21 | 28 | 20 | 27 | 14 | 27 | 31 | 41 | 28 | 22 | 9 |
| Not homeless | 15 | 22 | 36 | 26 | 12 | 13 | 32 | 42 | 27 | 32 | 30 | 11 |
| Foster youth | 20 | 25 | 36 | 18 | 16 | 12 | 34 | 38 | 34 | 34 | 25 | 6 |
| Not foster youth | 16 | 22 | 36 | 26 | 13 | 13 | 32 | 41 | 28 | 32 | 29 | 11 |
| American Indian or Alaska Native—Not economically disadvantaged | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| American Indian or Alaska Native—Economically disadvantaged | 17 | 17 | 48 | 18 | 15 | 7 | 40 | 39 | 28 | 42 | 20 | 9 |
| Asian—Not economically disadvantaged | 18 | 19 | 27 | 35 | 17 | 13 | 25 | 45 | 25 | 28 | 29 | 19 |
| Asian—Economically disadvantaged | 19 | 19 | 32 | 30 | 16 | 13 | 28 | 43 | 26 | 30 | 30 | 14 |
| Native Hawaiian or Other Pacific Islander—Not economically disadvantaged | 14 | 35 | 27 | 24 | 12 | 20 | 39 | 29 | 27 | 43 | 25 | 4 |
| Native Hawaiian or Other Pacific Islander—Economically disadvantaged | 16 | 28 | 38 | 18 | 9 | 22 | 34 | 34 | 28 | 35 | 28 | 8 |
| Filipino—Not economically disadvantaged | 7 | 24 | 38 | 31 | 5 | 15 | 34 | 46 | 16 | 34 | 32 | 18 |
| Filipino—Economically disadvantaged | 5 | 20 | 43 | 32 | 4 | 11 | 38 | 47 | 13 | 33 | 39 | 15 |
| Hispanic or Latino—Not economically disadvantaged | 23 | 20 | 32 | 25 | 20 | 12 | 29 | 39 | 33 | 29 | 27 | 11 |
| Hispanic or Latino—Economically disadvantaged | 15 | 23 | 37 | 25 | 12 | 14 | 33 | 41 | 27 | 33 | 29 | 10 |
| Black or African American—Not economically disadvantaged | 17 | 26 | 29 | 28 | 14 | 14 | 31 | 41 | 36 | 26 | 31 | 7 |
| Black or African American—Economically disadvantaged | 17 | 18 | 37 | 29 | 15 | 11 | 28 | 47 | 27 | 32 | 32 | 10 |
| White—Not economically disadvantaged | 27 | 15 | 27 | 31 | 24 | 13 | 20 | 43 | 33 | 25 | 27 | 15 |
| White—Economically disadvantaged | 22 | 21 | 30 | 27 | 18 | 15 | 26 | 41 | 32 | 28 | 28 | 13 |
| Two or more races—Not economically disadvantaged | 33 | 17 | 26 | 24 | 31 | 11 | 23 | 35 | 43 | 23 | 25 | 10 |
| Two or more races—Economically disadvantaged | 21 | 20 | 32 | 27 | 16 | 15 | 24 | 45 | 34 | 32 | 25 | 9 |

Table 7.E.10 Percentage of Students in Each Proficiency Level—Overall Assessment and Composites by Student Group, Grade Nine

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Student Group** | **Overall Proficiency Level 1** | **Overall Proficiency Level 2** | **Overall Proficiency Level 3** | **Overall Proficiency Level 4** | **Oral Language Proficiency Level 1** | **Oral Language Proficiency Level 2** | **Oral Language Proficiency Level 3** | **Oral Language Proficiency Level 4** | **Written Language Proficiency Level 1** | **Written Language Proficiency Level 2** | **Written Language Proficiency Level 3** | **Written Language Proficiency Level 4** |
| All | 25 | 29 | 33 | 13 | 21 | 20 | 35 | 24 | 37 | 41 | 18 | 5 |
| Male | 27 | 29 | 31 | 13 | 21 | 21 | 34 | 24 | 40 | 39 | 16 | 4 |
| Female | 23 | 29 | 35 | 13 | 20 | 20 | 37 | 24 | 32 | 43 | 20 | 5 |
| Nonbinary | 26 | 26 | 37 | 11 | 15 | 15 | 41 | 30 | 41 | 33 | 19 | 7 |
| American Indian or Alaska Native | 29 | 35 | 30 | 6 | 23 | 27 | 36 | 14 | 41 | 47 | 8 | 4 |
| Asian | 22 | 26 | 33 | 19 | 20 | 19 | 33 | 28 | 28 | 40 | 23 | 9 |
| Native Hawaiian or Other Pacific Islander | 17 | 35 | 34 | 13 | 13 | 22 | 37 | 28 | 30 | 46 | 21 | 3 |
| Filipino | 10 | 28 | 43 | 19 | 10 | 19 | 41 | 30 | 17 | 46 | 28 | 9 |
| Hispanic or Latino | 25 | 30 | 33 | 12 | 20 | 21 | 35 | 24 | 38 | 41 | 17 | 4 |
| Black or African American | 24 | 20 | 35 | 20 | 19 | 16 | 34 | 31 | 30 | 40 | 22 | 8 |
| White | 29 | 25 | 31 | 15 | 24 | 19 | 31 | 26 | 38 | 36 | 19 | 7 |
| Two or more races | 37 | 24 | 27 | 13 | 33 | 17 | 29 | 21 | 43 | 35 | 18 | 4 |
| No reported disabilities | 25 | 26 | 34 | 14 | 22 | 17 | 35 | 26 | 34 | 41 | 20 | 5 |
| Reported disabilities | 25 | 41 | 26 | 7 | 14 | 33 | 37 | 17 | 47 | 42 | 10 | 2 |
| Not economically disadvantaged | 35 | 23 | 28 | 14 | 32 | 16 | 29 | 23 | 43 | 35 | 17 | 6 |
| Economically disadvantaged | 24 | 30 | 34 | 13 | 19 | 21 | 36 | 24 | 36 | 42 | 18 | 4 |
| In US schools less than 12 months | 79 | 11 | 7 | 2 | 78 | 10 | 8 | 4 | 79 | 15 | 5 | 1 |
| In US schools 12 months or more | 18 | 31 | 36 | 14 | 13 | 22 | 39 | 27 | 31 | 45 | 20 | 5 |
| Duration unknown | 43 | 29 | 21 | 8 | 39 | 18 | 28 | 15 | 54 | 31 | 12 | 3 |
| Migrant education | 34 | 27 | 28 | 12 | 30 | 19 | 31 | 20 | 43 | 36 | 16 | 5 |
| Not migrant education | 25 | 29 | 33 | 13 | 20 | 20 | 35 | 24 | 36 | 41 | 18 | 5 |
| Armed forces family member | 15 | 34 | 33 | 17 | 10 | 24 | 37 | 30 | 30 | 45 | 19 | 5 |
| Not armed forces family member | 25 | 29 | 33 | 13 | 21 | 20 | 35 | 24 | 37 | 41 | 18 | 4 |
| Homeless | 44 | 24 | 23 | 9 | 39 | 17 | 27 | 17 | 52 | 32 | 13 | 3 |
| Not homeless | 24 | 29 | 33 | 13 | 19 | 20 | 36 | 25 | 36 | 42 | 18 | 5 |
| Foster youth | 29 | 32 | 27 | 12 | 21 | 22 | 32 | 25 | 45 | 39 | 13 | 3 |
| Not foster youth | 25 | 29 | 33 | 13 | 21 | 20 | 35 | 24 | 37 | 41 | 18 | 5 |
| American Indian or Alaska Native—Not economically disadvantaged | 25 | 33 | 33 | 8 | 25 | 17 | 42 | 17 | 33 | 50 | 8 | 8 |
| American Indian or Alaska Native—Economically disadvantaged | 30 | 35 | 30 | 6 | 23 | 28 | 35 | 14 | 42 | 46 | 8 | 3 |
| Asian—Not economically disadvantaged | 20 | 25 | 32 | 24 | 18 | 19 | 31 | 32 | 23 | 39 | 27 | 12 |
| Asian—Economically disadvantaged | 23 | 27 | 33 | 17 | 21 | 19 | 34 | 27 | 30 | 41 | 22 | 8 |
| Native Hawaiian or Other Pacific Islander—Not economically disadvantaged | 24 | 24 | 38 | 14 | 20 | 16 | 38 | 26 | 32 | 46 | 22 | 0 |
| Native Hawaiian or Other Pacific Islander—Economically disadvantaged | 15 | 39 | 33 | 13 | 11 | 25 | 36 | 28 | 30 | 47 | 20 | 4 |
| Filipino—Not economically disadvantaged | 10 | 28 | 46 | 16 | 9 | 21 | 41 | 29 | 15 | 51 | 29 | 6 |
| Filipino—Economically disadvantaged | 11 | 27 | 41 | 21 | 10 | 18 | 41 | 30 | 19 | 42 | 27 | 11 |
| Hispanic or Latino—Not economically disadvantaged | 40 | 23 | 26 | 11 | 36 | 16 | 28 | 20 | 49 | 33 | 14 | 4 |
| Hispanic or Latino—Economically disadvantaged | 23 | 31 | 34 | 12 | 18 | 21 | 37 | 24 | 36 | 43 | 18 | 4 |
| Black or African American—Not economically disadvantaged | 23 | 21 | 34 | 22 | 16 | 18 | 29 | 37 | 30 | 41 | 19 | 10 |
| Black or African American—Economically disadvantaged | 24 | 20 | 35 | 20 | 20 | 15 | 36 | 29 | 30 | 39 | 23 | 8 |
| White—Not economically disadvantaged | 28 | 22 | 29 | 20 | 25 | 16 | 28 | 30 | 35 | 32 | 22 | 11 |
| White—Economically disadvantaged | 29 | 26 | 31 | 14 | 24 | 19 | 32 | 25 | 38 | 38 | 19 | 5 |
| Two or more races—Not economically disadvantaged | 54 | 16 | 17 | 13 | 50 | 12 | 20 | 18 | 55 | 27 | 12 | 6 |
| Two or more races—Economically disadvantaged | 28 | 28 | 31 | 13 | 24 | 19 | 33 | 23 | 37 | 38 | 21 | 4 |

Table 7.E.11 Percentage of Students in Each Proficiency Level—Overall Assessment and Composites by Student Group, Grade Ten

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Student Group** | **Overall Proficiency Level 1** | **Overall Proficiency Level 2** | **Overall Proficiency Level 3** | **Overall Proficiency Level 4** | **Oral Language Proficiency Level 1** | **Oral Language Proficiency Level 2** | **Oral Language Proficiency Level 3** | **Oral Language Proficiency Level 4** | **Written Language Proficiency Level 1** | **Written Language Proficiency Level 2** | **Written Language Proficiency Level 3** | **Written Language Proficiency Level 4** |
| All | 22 | 25 | 33 | 20 | 18 | 17 | 33 | 31 | 32 | 39 | 22 | 7 |
| Male | 24 | 25 | 31 | 20 | 19 | 18 | 32 | 31 | 35 | 37 | 20 | 7 |
| Female | 20 | 24 | 36 | 20 | 18 | 16 | 35 | 31 | 27 | 40 | 25 | 8 |
| Nonbinary | 21 | 16 | 32 | 32 | 16 | 11 | 37 | 37 | 26 | 53 | 11 | 11 |
| American Indian or Alaska Native | 20 | 22 | 43 | 15 | 18 | 16 | 35 | 32 | 33 | 40 | 23 | 4 |
| Asian | 19 | 22 | 32 | 26 | 17 | 17 | 31 | 35 | 25 | 36 | 27 | 12 |
| Native Hawaiian or Other Pacific Islander | 16 | 32 | 37 | 15 | 12 | 23 | 37 | 27 | 28 | 47 | 19 | 6 |
| Filipino | 8 | 25 | 41 | 26 | 7 | 15 | 41 | 38 | 13 | 43 | 31 | 13 |
| Hispanic or Latino | 23 | 25 | 33 | 19 | 19 | 17 | 34 | 31 | 33 | 39 | 22 | 7 |
| Black or African American | 21 | 26 | 27 | 26 | 19 | 16 | 29 | 36 | 33 | 33 | 24 | 10 |
| White | 25 | 23 | 29 | 23 | 21 | 17 | 30 | 32 | 34 | 35 | 22 | 9 |
| Two or more races | 25 | 27 | 28 | 20 | 21 | 17 | 31 | 30 | 36 | 36 | 20 | 8 |
| No reported disabilities | 23 | 22 | 34 | 22 | 20 | 14 | 32 | 33 | 30 | 38 | 24 | 8 |
| Reported disabilities | 20 | 38 | 31 | 11 | 10 | 28 | 39 | 23 | 39 | 43 | 14 | 3 |
| Not economically disadvantaged | 25 | 22 | 31 | 22 | 22 | 15 | 31 | 32 | 33 | 36 | 23 | 9 |
| Economically disadvantaged | 22 | 25 | 34 | 20 | 18 | 17 | 34 | 31 | 32 | 39 | 22 | 7 |
| In US schools less than 12 months | 70 | 15 | 10 | 4 | 68 | 13 | 12 | 7 | 70 | 21 | 7 | 2 |
| In US schools 12 months or more | 18 | 25 | 35 | 21 | 14 | 17 | 35 | 34 | 29 | 40 | 23 | 8 |
| Duration unknown | 39 | 24 | 24 | 13 | 36 | 16 | 29 | 20 | 47 | 33 | 15 | 5 |
| Migrant education | 34 | 23 | 28 | 15 | 30 | 18 | 26 | 26 | 42 | 33 | 19 | 6 |
| Not migrant education | 22 | 25 | 33 | 20 | 18 | 17 | 34 | 32 | 32 | 39 | 22 | 7 |
| Armed forces family member | 12 | 28 | 38 | 22 | 8 | 17 | 39 | 36 | 25 | 41 | 25 | 9 |
| Not armed forces family member | 22 | 25 | 33 | 20 | 19 | 17 | 33 | 31 | 32 | 39 | 22 | 7 |
| Homeless | 36 | 22 | 26 | 15 | 33 | 16 | 27 | 24 | 43 | 35 | 17 | 5 |
| Not homeless | 21 | 25 | 34 | 20 | 17 | 17 | 34 | 32 | 31 | 39 | 22 | 8 |
| Foster youth | 29 | 30 | 30 | 11 | 21 | 22 | 35 | 22 | 41 | 39 | 16 | 3 |
| Not foster youth | 22 | 25 | 33 | 20 | 18 | 17 | 33 | 31 | 32 | 39 | 22 | 7 |
| American Indian or Alaska Native—Not economically disadvantaged | 23 | 41 | 27 | 9 | 14 | 27 | 32 | 27 | 50 | 32 | 14 | 5 |
| American Indian or Alaska Native—Economically disadvantaged | 19 | 16 | 48 | 16 | 19 | 12 | 36 | 33 | 27 | 42 | 26 | 4 |
| Asian—Not economically disadvantaged | 16 | 21 | 32 | 30 | 15 | 16 | 30 | 38 | 21 | 34 | 31 | 15 |
| Asian—Economically disadvantaged | 21 | 23 | 32 | 25 | 18 | 17 | 31 | 34 | 26 | 38 | 25 | 11 |
| Native Hawaiian or Other Pacific Islander—Not economically disadvantaged | 9 | 30 | 42 | 19 | 7 | 16 | 40 | 37 | 23 | 53 | 19 | 5 |
| Native Hawaiian or Other Pacific Islander—Economically disadvantaged | 18 | 32 | 36 | 13 | 14 | 26 | 37 | 24 | 29 | 46 | 19 | 6 |
| Filipino—Not economically disadvantaged | 9 | 25 | 37 | 29 | 7 | 16 | 39 | 38 | 14 | 43 | 29 | 14 |
| Filipino—Economically disadvantaged | 8 | 25 | 43 | 24 | 7 | 14 | 42 | 37 | 13 | 43 | 33 | 12 |
| Hispanic or Latino—Not economically disadvantaged | 28 | 22 | 31 | 19 | 25 | 14 | 31 | 30 | 37 | 36 | 21 | 7 |
| Hispanic or Latino—Economically disadvantaged | 22 | 25 | 34 | 19 | 18 | 17 | 34 | 31 | 32 | 39 | 22 | 7 |
| Black or African American—Not economically disadvantaged | 20 | 23 | 32 | 25 | 15 | 14 | 35 | 35 | 35 | 32 | 23 | 9 |
| Black or African American—Economically disadvantaged | 22 | 26 | 26 | 26 | 20 | 17 | 27 | 36 | 32 | 33 | 24 | 10 |
| White—Not economically disadvantaged | 22 | 22 | 30 | 27 | 18 | 17 | 29 | 36 | 28 | 35 | 23 | 14 |
| White—Economically disadvantaged | 26 | 24 | 29 | 21 | 21 | 17 | 30 | 31 | 36 | 35 | 22 | 7 |
| Two or more races—Not economically disadvantaged | 21 | 22 | 33 | 23 | 22 | 14 | 28 | 36 | 26 | 41 | 21 | 11 |
| Two or more races—Economically disadvantaged | 25 | 29 | 27 | 19 | 21 | 18 | 32 | 29 | 38 | 34 | 20 | 8 |

Table 7.E.12 Percentage of Students in Each Proficiency Level—Overall Assessment and Composites by Student Group, Grade Eleven

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Student Group** | **Overall Proficiency Level 1** | **Overall Proficiency Level 2** | **Overall Proficiency Level 3** | **Overall Proficiency Level 4** | **Oral Language Proficiency Level 1** | **Oral Language Proficiency Level 2** | **Oral Language Proficiency Level 3** | **Oral Language Proficiency Level 4** | **Written Language Proficiency Level 1** | **Written Language Proficiency Level 2** | **Written Language Proficiency Level 3** | **Written Language Proficiency Level 4** |
| All | 23 | 30 | 32 | 14 | 18 | 19 | 37 | 27 | 35 | 41 | 19 | 5 |
| Male | 25 | 31 | 31 | 14 | 18 | 20 | 36 | 26 | 38 | 40 | 18 | 4 |
| Female | 21 | 29 | 35 | 15 | 17 | 17 | 38 | 27 | 31 | 43 | 21 | 5 |
| Nonbinary | 10 | 28 | 31 | 31 | 3 | 21 | 34 | 41 | 17 | 45 | 24 | 14 |
| American Indian or Alaska Native | 16 | 21 | 45 | 18 | 12 | 16 | 37 | 34 | 34 | 28 | 33 | 4 |
| Asian | 22 | 25 | 32 | 21 | 17 | 17 | 33 | 33 | 29 | 38 | 25 | 8 |
| Native Hawaiian or Other Pacific Islander | 15 | 39 | 32 | 13 | 11 | 17 | 43 | 29 | 30 | 50 | 16 | 4 |
| Filipino | 8 | 29 | 43 | 20 | 5 | 20 | 44 | 32 | 15 | 45 | 32 | 8 |
| Hispanic or Latino | 23 | 31 | 32 | 13 | 18 | 19 | 37 | 26 | 36 | 42 | 18 | 4 |
| Black or African American | 22 | 27 | 32 | 19 | 14 | 14 | 40 | 31 | 36 | 33 | 23 | 8 |
| White | 25 | 26 | 30 | 19 | 20 | 17 | 32 | 31 | 35 | 38 | 21 | 6 |
| Two or more races | 32 | 25 | 28 | 16 | 27 | 16 | 29 | 28 | 41 | 37 | 16 | 5 |
| No reported disabilities | 23 | 27 | 34 | 16 | 19 | 16 | 36 | 29 | 32 | 41 | 21 | 5 |
| Reported disabilities | 24 | 44 | 25 | 7 | 12 | 31 | 40 | 17 | 46 | 43 | 10 | 2 |
| Not economically disadvantaged | 27 | 26 | 30 | 17 | 23 | 17 | 32 | 28 | 37 | 39 | 19 | 6 |
| Economically disadvantaged | 23 | 31 | 33 | 14 | 17 | 19 | 38 | 27 | 35 | 42 | 19 | 4 |
| In US schools less than 12 months | 73 | 14 | 10 | 4 | 70 | 11 | 12 | 6 | 74 | 18 | 7 | 2 |
| In US schools 12 months or more | 19 | 31 | 34 | 15 | 14 | 19 | 39 | 28 | 32 | 43 | 20 | 5 |
| Duration unknown | 42 | 26 | 26 | 7 | 36 | 19 | 27 | 18 | 50 | 37 | 9 | 3 |
| Migrant education | 35 | 26 | 26 | 12 | 31 | 18 | 29 | 22 | 45 | 35 | 17 | 3 |
| Not migrant education | 23 | 30 | 33 | 14 | 18 | 19 | 37 | 27 | 35 | 42 | 19 | 5 |
| Armed forces family member | 16 | 32 | 36 | 17 | 10 | 20 | 38 | 32 | 29 | 46 | 20 | 5 |
| Not armed forces family member | 23 | 30 | 32 | 14 | 18 | 19 | 37 | 27 | 35 | 41 | 19 | 5 |
| Homeless | 38 | 28 | 24 | 11 | 32 | 19 | 29 | 20 | 48 | 34 | 14 | 3 |
| Not homeless | 22 | 30 | 33 | 14 | 17 | 19 | 37 | 27 | 34 | 42 | 19 | 5 |
| Foster youth | 39 | 34 | 20 | 7 | 30 | 24 | 31 | 15 | 54 | 32 | 12 | 1 |
| Not foster youth | 23 | 30 | 32 | 14 | 18 | 19 | 37 | 27 | 35 | 41 | 19 | 5 |
| American Indian or Alaska Native—Not economically disadvantaged | 14 | 43 | 29 | 14 | 7 | 21 | 43 | 29 | 50 | 21 | 21 | 7 |
| American Indian or Alaska Native—Economically disadvantaged | 17 | 15 | 49 | 19 | 13 | 15 | 36 | 36 | 30 | 30 | 36 | 4 |
| Asian—Not economically disadvantaged | 21 | 24 | 29 | 26 | 16 | 17 | 30 | 37 | 27 | 38 | 26 | 9 |
| Asian—Economically disadvantaged | 22 | 26 | 33 | 20 | 17 | 18 | 34 | 31 | 30 | 38 | 24 | 7 |
| Native Hawaiian or Other Pacific Islander—Not economically disadvantaged | 21 | 28 | 36 | 15 | 15 | 15 | 36 | 33 | 26 | 54 | 15 | 5 |
| Native Hawaiian or Other Pacific Islander—Economically disadvantaged | 14 | 42 | 31 | 13 | 10 | 17 | 45 | 27 | 31 | 48 | 17 | 4 |
| Filipino—Not economically disadvantaged | 8 | 25 | 47 | 19 | 5 | 17 | 46 | 32 | 14 | 46 | 30 | 10 |
| Filipino—Economically disadvantaged | 8 | 31 | 41 | 20 | 5 | 21 | 42 | 32 | 15 | 44 | 34 | 6 |
| Hispanic or Latino—Not economically disadvantaged | 30 | 27 | 29 | 14 | 25 | 17 | 32 | 26 | 40 | 39 | 17 | 5 |
| Hispanic or Latino—Economically disadvantaged | 23 | 31 | 33 | 13 | 17 | 19 | 38 | 26 | 35 | 42 | 19 | 4 |
| Black or African American—Not economically disadvantaged | 23 | 20 | 36 | 21 | 13 | 11 | 41 | 36 | 30 | 39 | 23 | 7 |
| Black or African American—Economically disadvantaged | 22 | 29 | 31 | 18 | 15 | 15 | 40 | 30 | 38 | 32 | 22 | 8 |
| White—Not economically disadvantaged | 24 | 22 | 32 | 22 | 19 | 15 | 33 | 34 | 31 | 36 | 24 | 8 |
| White—Economically disadvantaged | 26 | 27 | 29 | 18 | 21 | 17 | 32 | 30 | 36 | 38 | 20 | 6 |
| Two or more races—Not economically disadvantaged | 35 | 20 | 29 | 16 | 30 | 12 | 26 | 32 | 42 | 36 | 15 | 6 |
| Two or more races—Economically disadvantaged | 31 | 26 | 27 | 15 | 26 | 17 | 30 | 27 | 41 | 38 | 17 | 4 |

Table 7.E.13 Percentage of Students in Each Proficiency Level—Overall Assessment and Composites by Student Group, Grade Twelve

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Student Group** | **Overall Proficiency Level 1** | **Overall Proficiency Level 2** | **Overall Proficiency Level 3** | **Overall Proficiency Level 4** | **Oral Language Proficiency Level 1** | **Oral Language Proficiency Level 2** | **Oral Language Proficiency Level 3** | **Oral Language Proficiency Level 4** | **Written Language Proficiency Level 1** | **Written Language Proficiency Level 2** | **Written Language Proficiency Level 3** | **Written Language Proficiency Level 4** |
| All | 25 | 30 | 31 | 15 | 18 | 19 | 35 | 28 | 38 | 40 | 18 | 4 |
| Male | 26 | 30 | 29 | 15 | 18 | 20 | 34 | 27 | 41 | 38 | 17 | 4 |
| Female | 23 | 29 | 33 | 15 | 18 | 17 | 37 | 28 | 33 | 43 | 19 | 5 |
| Nonbinary | 21 | 43 | 36 | 0 | 14 | 29 | 29 | 29 | 50 | 43 | 7 | 0 |
| American Indian or Alaska Native | 31 | 29 | 22 | 18 | 27 | 16 | 27 | 31 | 44 | 38 | 7 | 11 |
| Asian | 23 | 26 | 30 | 20 | 18 | 18 | 33 | 32 | 32 | 39 | 22 | 7 |
| Native Hawaiian or Other Pacific Islander | 19 | 33 | 37 | 11 | 11 | 17 | 42 | 30 | 36 | 36 | 21 | 6 |
| Filipino | 10 | 34 | 38 | 18 | 6 | 20 | 42 | 33 | 20 | 47 | 27 | 6 |
| Hispanic or Latino | 25 | 30 | 31 | 14 | 18 | 19 | 36 | 27 | 38 | 40 | 17 | 4 |
| Black or African American | 19 | 32 | 30 | 19 | 12 | 18 | 40 | 30 | 32 | 40 | 19 | 8 |
| White | 27 | 26 | 28 | 19 | 21 | 17 | 32 | 30 | 39 | 35 | 18 | 8 |
| Two or more races | 28 | 26 | 32 | 14 | 22 | 19 | 30 | 29 | 36 | 40 | 19 | 6 |
| No reported disabilities | 25 | 27 | 32 | 17 | 20 | 16 | 34 | 30 | 35 | 40 | 20 | 5 |
| Reported disabilities | 26 | 41 | 26 | 7 | 12 | 29 | 40 | 18 | 48 | 41 | 10 | 2 |
| Not economically disadvantaged | 27 | 27 | 29 | 17 | 20 | 18 | 32 | 29 | 38 | 38 | 19 | 6 |
| Economically disadvantaged | 25 | 30 | 31 | 14 | 18 | 19 | 36 | 28 | 38 | 40 | 18 | 4 |
| In US schools less than 12 months | 68 | 14 | 12 | 6 | 66 | 12 | 14 | 8 | 70 | 19 | 8 | 3 |
| In US schools 12 months or more | 22 | 30 | 32 | 15 | 15 | 19 | 37 | 29 | 36 | 41 | 18 | 5 |
| Duration unknown | 38 | 30 | 19 | 12 | 34 | 19 | 27 | 20 | 50 | 32 | 13 | 6 |
| Migrant education | 35 | 26 | 25 | 14 | 30 | 19 | 29 | 23 | 44 | 33 | 18 | 4 |
| Not migrant education | 25 | 30 | 31 | 15 | 18 | 19 | 35 | 28 | 37 | 40 | 18 | 4 |
| Armed forces family member | 18 | 30 | 35 | 17 | 10 | 18 | 37 | 35 | 32 | 43 | 19 | 5 |
| Not armed forces family member | 25 | 30 | 31 | 15 | 18 | 19 | 35 | 28 | 38 | 40 | 18 | 4 |
| Homeless | 37 | 26 | 26 | 11 | 30 | 18 | 29 | 22 | 47 | 36 | 13 | 3 |
| Not homeless | 24 | 30 | 31 | 15 | 17 | 19 | 36 | 28 | 37 | 40 | 18 | 5 |
| Foster youth | 39 | 34 | 21 | 5 | 31 | 22 | 34 | 14 | 53 | 38 | 8 | 1 |
| Not foster youth | 25 | 30 | 31 | 15 | 18 | 19 | 35 | 28 | 38 | 40 | 18 | 4 |
| American Indian or Alaska Native—Not economically disadvantaged | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| American Indian or Alaska Native—Economically disadvantaged | 26 | 31 | 26 | 17 | 26 | 9 | 31 | 34 | 40 | 43 | 6 | 11 |
| Asian—Not economically disadvantaged | 22 | 23 | 34 | 21 | 15 | 18 | 33 | 34 | 29 | 40 | 24 | 8 |
| Asian—Economically disadvantaged | 24 | 28 | 29 | 20 | 19 | 18 | 33 | 31 | 33 | 38 | 22 | 6 |
| Native Hawaiian or Other Pacific Islander—Not economically disadvantaged | 14 | 33 | 38 | 14 | 5 | 14 | 38 | 43 | 29 | 52 | 19 | 0 |
| Native Hawaiian or Other Pacific Islander—Economically disadvantaged | 19 | 33 | 37 | 11 | 12 | 18 | 43 | 28 | 38 | 34 | 22 | 7 |
| Filipino—Not economically disadvantaged | 9 | 34 | 37 | 20 | 5 | 19 | 40 | 36 | 19 | 50 | 24 | 7 |
| Filipino—Economically disadvantaged | 11 | 34 | 38 | 17 | 6 | 20 | 43 | 31 | 21 | 44 | 28 | 6 |
| Hispanic or Latino—Not economically disadvantaged | 30 | 27 | 28 | 15 | 23 | 18 | 32 | 27 | 41 | 37 | 17 | 4 |
| Hispanic or Latino—Economically disadvantaged | 25 | 30 | 31 | 14 | 18 | 19 | 36 | 27 | 38 | 41 | 17 | 4 |
| Black or African American—Not economically disadvantaged | 12 | 43 | 29 | 16 | 6 | 27 | 47 | 20 | 31 | 41 | 20 | 8 |
| Black or African American—Economically disadvantaged | 21 | 29 | 30 | 20 | 14 | 15 | 38 | 33 | 33 | 40 | 19 | 8 |
| White—Not economically disadvantaged | 18 | 25 | 30 | 28 | 12 | 17 | 32 | 39 | 28 | 36 | 21 | 15 |
| White—Economically disadvantaged | 30 | 26 | 27 | 17 | 24 | 17 | 32 | 28 | 42 | 35 | 17 | 6 |
| Two or more races—Not economically disadvantaged | 28 | 19 | 36 | 17 | 25 | 11 | 28 | 36 | 34 | 38 | 22 | 6 |
| Two or more races—Economically disadvantaged | 28 | 28 | 31 | 13 | 21 | 21 | 31 | 27 | 36 | 40 | 18 | 6 |

### Appendix 7.F: Demographic Student Group Summaries

Table 7.F.1 **Demographic Student Group Summary—Kindergarten Through Grade Two**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Student Group** | **Kindergarten: Number Registered** | **Kindergarten: Number Tested** | **Kindergarten: Percent Tested** | **Grade 1: Number Registered** | **Grade 1: Number Tested** | **Grade 1: Percent Tested** | **Grade 2: Number Registered** | **Grade 2: Number Tested** | **Grade 2: Percent Tested** |
| All | 140,657 | 139,359 | 99.08 | 101,727 | 100,977 | 99.26 | 101,610 | 101,036 | 99.44 |
| Male | 72,987 | 72,286 | 99.04 | 53,417 | 53,021 | 99.26 | 54,027 | 53,730 | 99.45 |
| Female | 67,659 | 67,062 | 99.12 | 48,294 | 47,940 | 99.27 | 47,572 | 47,295 | 99.42 |
| Nonbinary | 11 | 11 | 100.00 | 16 | 16 | 100.00 | 11 | 11 | 100.00 |
| American Indian or Alaska Native | 264 | 260 | 98.48 | 181 | 178 | 98.34 | 157 | 154 | 98.09 |
| Asian | 20,375 | 20,137 | 98.83 | 12,830 | 12,710 | 99.06 | 11,668 | 11,577 | 99.22 |
| Native Hawaiian or Other Pacific Islander | 332 | 329 | 99.10 | 249 | 246 | 98.80 | 255 | 252 | 98.82 |
| Filipino | 902 | 894 | 99.11 | 616 | 613 | 99.51 | 667 | 664 | 99.55 |
| Hispanic or Latino | 107,363 | 106,515 | 99.21 | 80,081 | 79,561 | 99.35 | 81,699 | 81,312 | 99.53 |
| Black or African American | 731 | 719 | 98.36 | 526 | 518 | 98.48 | 466 | 458 | 98.28 |
| White | 8,097 | 7,984 | 98.60 | 5,672 | 5,622 | 99.12 | 5,381 | 5,328 | 99.02 |
| Two or more races | 2,593 | 2,521 | 97.22 | 1,572 | 1,529 | 97.26 | 1,317 | 1,291 | 98.03 |
| No reported disabilities | 125,643 | 124,541 | 99.12 | 89,412 | 88,759 | 99.27 | 88,566 | 88,080 | 99.45 |
| Reported disabilities | 15,014 | 14,818 | 98.69 | 12,315 | 12,218 | 99.21 | 13,044 | 12,956 | 99.33 |
| Not economically disadvantaged | 29,544 | 29,108 | 98.52 | 17,436 | 17,196 | 98.62 | 15,385 | 15,190 | 98.73 |
| Economically disadvantaged | 111,113 | 110,251 | 99.22 | 84,291 | 83,781 | 99.39 | 86,225 | 85,846 | 99.56 |
| In US schools less than 12 months | 111,494 | 110,440 | 99.05 | 9,017 | 8,785 | 97.43 | 6,454 | 6,285 | 97.38 |
| In US schools 12 months or more | 27,081 | 26,961 | 99.56 | 92,008 | 91,536 | 99.49 | 94,588 | 94,210 | 99.60 |
| Duration unknown | 2,082 | 1,958 | 94.04 | 702 | 656 | 93.45 | 568 | 541 | 95.25 |
| Migrant education | 2,635 | 2,627 | 99.70 | 2,401 | 2,393 | 99.67 | 2,702 | 2,693 | 99.67 |
| Not migrant education | 138,022 | 136,732 | 99.07 | 99,326 | 98,584 | 99.25 | 98,908 | 98,343 | 99.43 |
| Armed forces family member | 969 | 961 | 99.17 | 941 | 936 | 99.47 | 1,059 | 1,056 | 99.72 |
| Not armed forces family member | 139,688 | 138,398 | 99.08 | 100,786 | 100,041 | 99.26 | 100,551 | 99,980 | 99.43 |
| Homeless | 7,527 | 7,422 | 98.61 | 5,929 | 5,867 | 98.95 | 6,216 | 6,164 | 99.16 |
| Not homeless | 133,130 | 131,937 | 99.10 | 95,798 | 95,110 | 99.28 | 95,394 | 94,872 | 99.45 |
| Foster youth | 458 | 454 | 99.13 | 310 | 306 | 98.71 | 277 | 275 | 99.28 |
| Not foster youth | 140,199 | 138,905 | 99.08 | 101,417 | 100,671 | 99.26 | 101,333 | 100,761 | 99.44 |

Table 7.F.2 **Demographic Student Group Summary—Grade Three Through Grade Five**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Student Group** | **Grade 3: Number Registered** | **Grade 3: Number Tested** | **Grade 3: Percent Tested** | **Grade 4: Number Registered** | **Grade 4: Number Tested** | **Grade 4: Percent Tested** | **Grade 5: Number Registered** | **Grade 5: Number Tested** | **Grade 5: Percent Tested** |
| All | 101,025 | 100,486 | 99.47 | 96,708 | 96,119 | 99.39 | 91,414 | 90,873 | 99.41 |
| Male | 53,748 | 53,459 | 99.46 | 51,355 | 51,043 | 99.39 | 48,184 | 47,884 | 99.38 |
| Female | 47,271 | 47,021 | 99.47 | 45,348 | 45,071 | 99.39 | 43,220 | 42,979 | 99.44 |
| Nonbinary | 6 | 6 | 100.00 | 5 | 5 | 100.00 | 10 | 10 | 100.00 |
| American Indian or Alaska Native | 138 | 138 | 100.00 | 145 | 145 | 100.00 | 125 | 123 | 98.40 |
| Asian | 10,914 | 10,824 | 99.18 | 9,932 | 9,826 | 98.93 | 8,244 | 8,185 | 99.28 |
| Native Hawaiian or Other Pacific Islander | 277 | 274 | 98.92 | 269 | 267 | 99.26 | 287 | 276 | 96.17 |
| Filipino | 757 | 750 | 99.08 | 818 | 813 | 99.39 | 785 | 779 | 99.24 |
| Hispanic or Latino | 81,730 | 81,371 | 99.56 | 79,074 | 78,689 | 99.51 | 76,179 | 75,777 | 99.47 |
| Black or African American | 454 | 451 | 99.34 | 439 | 426 | 97.04 | 418 | 415 | 99.28 |
| White | 5,355 | 5,311 | 99.18 | 4,819 | 4,771 | 99.00 | 4,271 | 4,234 | 99.13 |
| Two or more races | 1,400 | 1,367 | 97.64 | 1,212 | 1,182 | 97.52 | 1,105 | 1,084 | 98.10 |
| No reported disabilities | 87,317 | 86,855 | 99.47 | 82,212 | 81,703 | 99.38 | 76,621 | 76,204 | 99.46 |
| Reported disabilities | 13,708 | 13,631 | 99.44 | 14,496 | 14,416 | 99.45 | 14,793 | 14,669 | 99.16 |
| Not economically disadvantaged | 15,167 | 14,973 | 98.72 | 13,636 | 13,421 | 98.42 | 12,196 | 12,048 | 98.79 |
| Economically disadvantaged | 85,858 | 85,513 | 99.60 | 83,072 | 82,698 | 99.55 | 79,218 | 78,825 | 99.50 |
| In US schools less than 12 months | 5,963 | 5,818 | 97.57 | 5,509 | 5,353 | 97.17 | 5,165 | 5,057 | 97.91 |
| In US schools 12 months or more | 94,500 | 94,136 | 99.61 | 90,720 | 90,313 | 99.55 | 85,827 | 85,423 | 99.53 |
| Duration unknown | 562 | 532 | 94.66 | 479 | 453 | 94.57 | 422 | 393 | 93.13 |
| Migrant education | 2,721 | 2,715 | 99.78 | 2,456 | 2,451 | 99.80 | 2,525 | 2,509 | 99.37 |
| Not migrant education | 98,304 | 97,771 | 99.46 | 94,252 | 93,668 | 99.38 | 88,889 | 88,364 | 99.41 |
| Armed forces family member | 1,072 | 1,065 | 99.35 | 1,035 | 1,031 | 99.61 | 1,064 | 1,062 | 99.81 |
| Not armed forces family member | 99,953 | 99,421 | 99.47 | 95,673 | 95,088 | 99.39 | 90,350 | 89,811 | 99.40 |
| Homeless | 6,492 | 6,454 | 99.41 | 6,428 | 6,381 | 99.27 | 6,179 | 6,140 | 99.37 |
| Not homeless | 94,533 | 94,032 | 99.47 | 90,280 | 89,738 | 99.40 | 85,235 | 84,733 | 99.41 |
| Foster youth | 259 | 257 | 99.23 | 263 | 263 | 100.00 | 280 | 279 | 99.64 |
| Not foster youth | 100,766 | 100,229 | 99.47 | 96,445 | 95,856 | 99.39 | 91,134 | 90,594 | 99.41 |

Table 7.F.3 **Demographic Student Group Summary—Grade Six Through Grade Eight**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Student Group** | **Grade 6: Number Registered** | **Grade 6: Number Tested** | **Grade 6: Percent Tested** | **Grade 7: Number Registered** | **Grade 7: Number Tested** | **Grade 7: Percent Tested** | **Grade 8: Number Registered** | **Grade 8: Number Tested** | **Grade 8: Percent Tested** |
| All | 77,975 | 77,259 | 99.08 | 68,340 | 67,555 | 98.85 | 62,577 | 61,728 | 98.64 |
| Male | 41,606 | 41,193 | 99.01 | 36,654 | 36,226 | 98.83 | 34,222 | 33,756 | 98.64 |
| Female | 36,352 | 36,050 | 99.17 | 31,679 | 31,323 | 98.88 | 28,342 | 27,960 | 98.65 |
| Nonbinary | 17 | 16 | 94.12 | 7 | 6 | 85.71 | 13 | 12 | 92.31 |
| American Indian or Alaska Native | 103 | 103 | 100.00 | 98 | 95 | 96.94 | 96 | 95 | 98.96 |
| Asian | 6,385 | 6,315 | 98.90 | 5,536 | 5,486 | 99.10 | 4,719 | 4,654 | 98.62 |
| Native Hawaiian or Other Pacific Islander | 247 | 244 | 98.79 | 227 | 223 | 98.24 | 213 | 208 | 97.65 |
| Filipino | 669 | 661 | 98.80 | 657 | 645 | 98.17 | 626 | 621 | 99.20 |
| Hispanic or Latino | 65,727 | 65,172 | 99.16 | 57,436 | 56,798 | 98.89 | 53,162 | 52,471 | 98.70 |
| Black or African American | 356 | 345 | 96.91 | 323 | 320 | 99.07 | 270 | 263 | 97.41 |
| White | 3,591 | 3,549 | 98.83 | 3,349 | 3,299 | 98.51 | 2,891 | 2,842 | 98.31 |
| Two or more races | 897 | 870 | 96.99 | 714 | 689 | 96.50 | 600 | 574 | 95.67 |
| No reported disabilities | 63,810 | 63,286 | 99.18 | 55,343 | 54,776 | 98.98 | 50,353 | 49,753 | 98.81 |
| Reported disabilities | 14,165 | 13,973 | 98.64 | 12,997 | 12,779 | 98.32 | 12,224 | 11,975 | 97.96 |
| Not economically disadvantaged | 10,551 | 10,363 | 98.22 | 9,333 | 9,140 | 97.93 | 8,486 | 8,286 | 97.64 |
| Economically disadvantaged | 67,424 | 66,896 | 99.22 | 59,007 | 58,415 | 99.00 | 54,091 | 53,442 | 98.80 |
| In US schools less than 12 months | 4,767 | 4,630 | 97.13 | 4,615 | 4,490 | 97.29 | 4,166 | 4,044 | 97.07 |
| In US schools 12 months or more | 72,670 | 72,127 | 99.25 | 63,229 | 62,610 | 99.02 | 57,979 | 57,290 | 98.81 |
| Duration unknown | 538 | 502 | 93.31 | 496 | 455 | 91.73 | 432 | 394 | 91.20 |
| Migrant education | 2,101 | 2,086 | 99.29 | 1,760 | 1,751 | 99.49 | 1,676 | 1,664 | 99.28 |
| Not migrant education | 75,874 | 75,173 | 99.08 | 66,580 | 65,804 | 98.83 | 60,901 | 60,064 | 98.63 |
| Armed forces family member | 732 | 726 | 99.18 | 616 | 611 | 99.19 | 787 | 776 | 98.60 |
| Not armed forces family member | 77,243 | 76,533 | 99.08 | 67,724 | 66,944 | 98.85 | 61,790 | 60,952 | 98.64 |
| Homeless | 5,099 | 5,041 | 98.86 | 4,422 | 4,348 | 98.33 | 4,219 | 4,152 | 98.41 |
| Not homeless | 72,876 | 72,218 | 99.10 | 63,918 | 63,207 | 98.89 | 58,358 | 57,576 | 98.66 |
| Foster youth | 250 | 244 | 97.60 | 216 | 206 | 95.37 | 219 | 212 | 96.80 |
| Not foster youth | 77,725 | 77,015 | 99.09 | 68,124 | 67,349 | 98.86 | 62,358 | 61,516 | 98.65 |

Table 7.F.4 **Demographic Student Group Summary—Grade Nine and Grade Ten**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Student Group** | **Grade 9: Number Registered** | **Grade 9: Number Tested** | **Grade 9: Percent Tested** | **Grade 10: Number Registered** | **Grade 10: Number Tested** | **Grade 10: Percent Tested** |
| All | 64,862 | 62,748 | 96.74 | 62,242 | 59,957 | 96.33 |
| Male | 36,548 | 35,278 | 96.53 | 35,315 | 33,951 | 96.14 |
| Female | 28,284 | 27,441 | 97.02 | 26,904 | 25,985 | 96.58 |
| Nonbinary | 30 | 29 | 96.67 | 23 | 21 | 91.30 |
| American Indian or Alaska Native | 94 | 87 | 92.55 | 105 | 100 | 95.24 |
| Asian | 4,668 | 4,554 | 97.56 | 4,556 | 4,446 | 97.59 |
| Native Hawaiian or Other Pacific Islander | 231 | 219 | 94.81 | 206 | 192 | 93.20 |
| Filipino | 682 | 665 | 97.51 | 691 | 669 | 96.82 |
| Hispanic or Latino | 55,165 | 53,348 | 96.71 | 53,021 | 51,016 | 96.22 |
| Black or African American | 316 | 304 | 96.20 | 306 | 299 | 97.71 |
| White | 2,967 | 2,887 | 97.30 | 2,785 | 2,694 | 96.73 |
| Two or more races | 739 | 684 | 92.56 | 572 | 541 | 94.58 |
| No reported disabilities | 52,575 | 51,012 | 97.03 | 50,452 | 48,776 | 96.68 |
| Reported disabilities | 12,287 | 11,736 | 95.52 | 11,790 | 11,181 | 94.83 |
| Not economically disadvantaged | 10,386 | 9,910 | 95.42 | 9,401 | 8,943 | 95.13 |
| Economically disadvantaged | 54,476 | 52,838 | 96.99 | 52,841 | 51,014 | 96.54 |
| In US schools less than 12 months | 8,397 | 7,986 | 95.11 | 5,135 | 4,922 | 95.85 |
| In US schools 12 months or more | 55,616 | 54,031 | 97.15 | 56,510 | 54,514 | 96.47 |
| Duration unknown | 849 | 731 | 86.10 | 597 | 521 | 87.27 |
| Migrant education | 1,388 | 1,368 | 98.56 | 1,511 | 1,483 | 98.15 |
| Not migrant education | 63,474 | 61,380 | 96.70 | 60,731 | 58,474 | 96.28 |
| Armed forces family member | 598 | 584 | 97.66 | 822 | 810 | 98.54 |
| Not armed forces family member | 64,264 | 62,164 | 96.73 | 61,420 | 59,147 | 96.30 |
| Homeless | 4,232 | 4,042 | 95.51 | 4,003 | 3,806 | 95.08 |
| Not homeless | 60,630 | 58,706 | 96.83 | 58,239 | 56,151 | 96.41 |
| Foster youth | 285 | 255 | 89.47 | 292 | 267 | 91.44 |
| Not foster youth | 64,577 | 62,493 | 96.77 | 61,950 | 59,690 | 96.35 |

Table 7.F.5 **Demographic Student Group Summary—Grade Eleven and Grade Twelve**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Student Group** | **Grade 11: Number Registered** | **Grade 11: Number Tested** | **Grade 11: Percent Tested** | **Grade 12: Number Registered** | **Grade 12: Number Tested** | **Grade 12: Percent Tested** |
| All | 54,151 | 51,629 | 95.34 | 46,301 | 41,969 | 90.64 |
| Male | 30,625 | 29,157 | 95.21 | 26,779 | 24,107 | 90.02 |
| Female | 23,492 | 22,440 | 95.52 | 19,505 | 17,847 | 91.50 |
| Nonbinary | 34 | 32 | 94.12 | 17 | 15 | 88.24 |
| American Indian or Alaska Native | 73 | 68 | 93.15 | 56 | 51 | 91.07 |
| Asian | 4,146 | 4,005 | 96.60 | 3,880 | 3,553 | 91.57 |
| Native Hawaiian or Other Pacific Islander | 192 | 179 | 93.23 | 167 | 150 | 89.82 |
| Filipino | 717 | 688 | 95.96 | 704 | 650 | 92.33 |
| Hispanic or Latino | 45,959 | 43,750 | 95.19 | 39,004 | 35,284 | 90.46 |
| Black or African American | 259 | 250 | 96.53 | 258 | 238 | 92.25 |
| White | 2,293 | 2,211 | 96.42 | 1,847 | 1,705 | 92.31 |
| Two or more races | 512 | 478 | 93.36 | 385 | 338 | 87.79 |
| No reported disabilities | 43,575 | 41,706 | 95.71 | 36,553 | 33,682 | 92.15 |
| Reported disabilities | 10,576 | 9,923 | 93.83 | 9,748 | 8,287 | 85.01 |
| Not economically disadvantaged | 8,306 | 7,816 | 94.10 | 7,058 | 6,158 | 87.25 |
| Economically disadvantaged | 45,845 | 43,813 | 95.57 | 39,243 | 35,811 | 91.25 |
| In US schools less than 12 months | 4,094 | 3,901 | 95.29 | 2,540 | 2,374 | 93.46 |
| In US schools 12 months or more | 49,542 | 47,277 | 95.43 | 43,526 | 39,396 | 90.51 |
| Duration unknown | 515 | 451 | 87.57 | 235 | 199 | 84.68 |
| Migrant education | 1,422 | 1,379 | 96.98 | 1,145 | 1,092 | 95.37 |
| Not migrant education | 52,729 | 50,250 | 95.30 | 45,156 | 40,877 | 90.52 |
| Armed forces family member | 774 | 748 | 96.64 | 579 | 551 | 95.16 |
| Not armed forces family member | 53,377 | 50,881 | 95.32 | 45,722 | 41,418 | 90.59 |
| Homeless | 3,701 | 3,470 | 93.76 | 3,553 | 3,213 | 90.43 |
| Not homeless | 50,450 | 48,159 | 95.46 | 42,748 | 38,756 | 90.66 |
| Foster youth | 287 | 246 | 85.71 | 249 | 212 | 85.14 |
| Not foster youth | 53,864 | 51,383 | 95.39 | 46,052 | 41,757 | 90.67 |

## Psychometric Analyses

### Overview

This chapter describes the psychometric analyses conducted by ETS for the Summative English Language Proficiency Assessments for California (ELPAC), including classical item analyses, differential item functioning (DIF) analyses, item response theory (IRT) analyses, and response time analyses, as well as analyses to support reliability and validity evidence.

#### Summary of the Analyses

Each of the following sets of analyses for the Summative ELPAC is presented in the body of the text and in the listed appendices:

1. **Classical Item Analyses—**Classical item analysis for the Summative ELPAC is discussed in section [*8.2 Classical Item Analyses*](#_Classical_Item_Analyses). The results of the classical item analyses, including item difficulty indice*s* (*p-*values) and item-total correlation coefficients for dichotomous and polytomous items, are provided in table 8.A.1 through table 8.A.22 in [appendix 8.A](#_Alternative_Text_for_31). Table 8.A.1 provides overall results, while table 8.A.2 through table 8.A.8 provide results by task type and by item type. Table 8.A.9 through table 8.A.22 include results for individual items that are identified as either operational or field test.
2. **DIF Analyses—**DIF analysis is described in section [*8.3 Differential Item Functioning Analyses*](#_Differential_Item_Functioning_1). Table 8.B.1 through table 8.B.3, in [appendix 8.B](#_Appendix_8.B:_Differential), present the results of the DIF analysis for Summative ELPAC field test items.
3. **IRT Analyses—**IRT analyses, including calibrations, are presented in section [*8.4 Item Response Theory Analyses*](#_Item_Response_Theory). Table 8.6 and table 8.7 present the summary statistics for the *a-*parameter estimates for operational items. Table 8.8 and table 8.9 present the summary statistics for the *b-*parameter estimates for operational items. Tables in [appendix 8.C](#_Appendix_8.C:_Item_1) provide IRT results for individual operational and field test items, as well as the distribution of *a*- and *b*-parameter estimates for each domain, by grade level or grade span.
4. **Response Time Analyses—**ELPAC assessments are untimed, but test examiners need guidance on anticipated test duration as they schedule administrations. Response time analysis is described in section [*8.5 Response Time Analyses*](#_Response_Time_Analysis). Summary information regarding total test response times is presented in table 8.1. Table 8.D.1 in [appendix 8.D](#_Appendix_8.D:_Response_1) provides summary statistics of response times for the Summative ELPAC at the first, tenth, twenty-fifth, fiftieth, seventy-fifth, ninetieth, and ninety-ninth percentiles.
5. **Reliability Analyses—**Reliability estimation for the Summative ELPAC is illustrated in section [*8.6 Reliability Analyses*](#_Reliability_Analyses)*.*
6. **Validity Evidence—**Validity evidence related to the Summative ELPAC is discussed in section [*8.7 Validity Evidence*](#_Validity_Evidence).

#### Samples Used for Analyses

The Summative ELPAC samples were created by performing the following steps for each domain and grade level or grade span:

1. Remove all test takers who are not English learner (EL) students (i.e., English language acquisition status is reclassified fluent English proficient (RFEP), initial fluent English proficient, English only, or blank)
2. Remove all test takers with any exempted domains or who used unlisted resources that change the construct of the assessment
3. Remove all test takers who did not respond to at least four, three, five, and two items for the Listening, Speaking, Reading, and Writing domains, respectively

Omitted responses were treated as incorrect, and not-reached responses were treated as not presented in all statistical analyses (item analysis, DIF, IRT).

Table 8.1 presents the number and percentage of students who were part of the item analysis or IRT analysis samples, by grade level or grade span.

Table 8.1 Summary of Completion of the Summative ELPAC

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Grade Level or Grade Span** | **Listening Item Analysis Sample** | **Speaking Item Analysis Sample** | **Reading Item Analysis Sample** | **Writing Item Analysis Sample** | **Oral IRT Analysis Sample** | **Written IRT Analysis Sample** |
| Kindergarten | 51,316 | 58,010 | 25,647 | 47,499 | 87,613 | 47,686 |
| 1 | 37,990 | 39,798 | 12,965 | 29,937 | 63,981 | 30,041 |
| 2 | 39,573 | 40,523 | 17,468 | 30,704 | 66,035 | 30,704 |
| 3–5 | 145,210 | 145,210 | 64,761 | 246,850 | 223,825 | 250,033 |
| 6–8 | 111,674 | 111,674 | 44,700 | 171,635 | 159,591 | 176,974 |
| 9–10 | 67,709 | 67,709 | 23,390 | 96,478 | 89,037 | 99,082 |
| 11–12 | 52,813 | 52,813 | 25,731 | 72,261 | 68,590 | 76,224 |

### Classical Item Analyses

Classical item analyses are conducted to evaluate the performance of all test items with respect to item difficulty, item-total correlation, and distractor analysis. The associated flagging rules of these statistics are used to identify items that are not performing as expected.

#### Classical Item Difficulty Indices (*p*-value and Average Item Score)

Items scored as one (correct) or zero (incorrect) are referred to as dichotomous items. Items scored from zero to some number of points greater than one are called polytomous items.

For dichotomous items, item difficulty is indicated by its *p*-value, which is the proportion of students who answer the item correctly. The range of *p*-values is from 0.00 to 1.00. Items with high *p*-values are easier items; those with low *p*-values are more difficult. Dichotomous items are flagged for review if their *p*-values are above 0.95 (i.e., too easy). Two-choice dichotomous single-select items, three-choice dichotomous single-select items, and all other dichotomous items are flagged as too difficult if their *p*-values are below 0.50, 0.30, and 0.20, respectively.

The formula for the *p*-value for a dichotomous item is presented in equation 8.1. *Refer to the* [*Alternative Text for Equation 8.1*](#_Alternative_Text_for) *for a description of this equation.*

 (8.1)

where,

*Xij* is the score (0 or 1) received for a given dichotomous item *i* for student *j*, and

*Ji* is the total number of students who were presented with item *i*.

For polytomous items, the difficulty is indicated by either the average item score (AIS) or *p*-‍value. The AIS can range from 0.00 to the maximum total possible points for an item. Desired AIS values for polytomous items generally fall within the range of 20 percent to 80 percent of the maximum obtainable item score; items with values outside this range are flagged for review. To facilitate the interpretation, the AIS values for polytomous items are often expressed as the proportion of the maximum possible score, which are equivalent to the *p-*values for dichotomous items.

For polytomous items, the *p-*value is defined as presented in equation 8.2. *Refer to the* [*Alternative Text for Equation 8.2*](#_Alternative_Text_for_1) *for a description of this equation.*

 (8.2)

where,

*Xij* is the score assigned for a given polytomous item *i* and student *j*,

*Ji* is the total number of students who were presented with item *i*, and

*Mi* is the maximum possible score for item *i*.

#### Item-Total Correlation

An important indicator of item discrimination is the item-total correlation, defined as the correlation between student scores on an individual item and student “total” scores on the assessment.

The item-total correlation statistic describes the relationship between students’ performance on a specific item and students’ performance on the total assessment. It is calculated as the correlation coefficient between the item score and total score—specifically, the polyserial correlation is used as the index of item-total correlation for both polytomous and dichotomous items. Statistically, it is calculated as the correlation between an observed continuous variable and an unobserved continuous variable hypothesized to underlie the variable with ordered categories (Olsson, Drasgow, & Dorans, 1982). The total scale score or the raw score is used as the criterion score for this analysis.

Theoretically, the polyserial correlation ranges from −1.0 (for a perfect negative relationship) to 1.0 (for a perfect positive relationship) and is estimated as presented in equation 8.3. *Refer to the* [*Alternative Text for Equation 8.3*](#_Alternative_Text_for_36) *for a description of this equation.*

 (8.3)

where,

*β* is the item parameter to be estimated from the data, with the estimate denoted as , using maximum likelihood estimation; it is a regression coefficient (slope) for predicting the continuous version of an item score onto the continuous version of the total score;

*s2tot* is the variance of the criterion (for example, the students’ total score); and

*stot* is the standard deviation (SD) of the criterion.

For a polytomous item, there is a regression for each boundary between item scores, with all regressions for the same item sharing a common slope, *β*. For a polytomous item with *m* possible score values, there are *m−*1 regressions.

Acceptable values for this correlation coefficient are positive and greater than 0.20. A relatively high item-total correlation coefficient value is preferred, as it indicates that higher-performing students tend to perform better on the item than lower-performing students. An item with a negative item-total correlation typically signifies a problem with the item, as that indicates that

* the higher-performing students on the overall assessment tend to respond incorrectly to the item if dichotomous, or are assigned a low score for the item if polytomous; or
* the lower-performing students on the overall assessment are responding correctly to the item if dichotomous, or are assigned a high score for that item if polytomous.

#### Distribution of Item Scores

For polytomous items, examination of the distribution of scores assists in showing how well items performed. If no students were given the highest possible score, the item may not be functioning as expected because the item may be confusing, poorly worded, or just unexpectedly difficult; the scoring rubric may be flawed; or students may not have had an opportunity to learn the content. If the rubric for an item allowed for partial credit but nearly all students received either full credit or partial credit, the rubric should be reviewed for whether the rubric for the partial credit score category should be revised.

Items with a low percentage (i.e., less than 3 percent) of students obtaining any score point were flagged for review. Such items may pose problems during IRT calibration. They need to be carefully reviewed and may need to be excluded from the item calibration analyses.

#### Omit Rates

If a student views an item, leaves it unanswered, and then goes on to view and answer another item, the missing response is classified as an “omit.” If the student omits an item in the Speaking and Writing domains—that is, leaves the item unanswered—and does not view additional items, the responses for the successive items are classified as “not seen.”

##### Rates for Dichotomous and Polytomous Items

For both dichotomous and polytomous items, examining the omit rate is useful for identifying potential problems with test features such as testing time and item or test layout. Items with high omit rates are flagged for further investigation by content specialists to ensure that no issues are found with these items. Omit rates for polytomous items tend to be higher than for dichotomous items.

##### No-Response Rate

The *Mark as No Response* contextual menu option is a specific case of an omitted item. The *Mark as No Response* option should be used when the item was presented to the student and the student did not provide a response despite the test examiner’s best efforts to elicit a response. Similar to the omit rate, the Mark as No Response information is useful for identifying potential problems with an item.

#### Distractor Analyses

Distractor analyses were conducted on selected-response (SR) items (i.e., items that were not constructed response). The statistics for each item included the proportion of students selecting each distractor (incorrect response), computed for the group of all students in the analysis sample, and were also computed separately for the highest-performing 20 percent of students. Items were flagged for review if more high-performing students chose any distractor rather than the key. Such a result indicated that the item may have multiple correct answers or have the wrong key (i.e., the item was miskeyed).

For SR items, the distractor-total correlation describes the relationship between selecting a distractor for a specific item and performance on the total assessment. The polyserial correlation was calculated for the distractors, like the item-total correlation previously described, except that the regressions were implemented on the distractors rather than the keys. Items with distractor-total correlations not significantly below zero were flagged for review, as these items may have multiple correct answers, be miskeyed, or have other content issues.

#### Summary of Classical Item Analyses Flagging Criteria

An item was flagged for review if the item analysis yielded any of the following results. One item could have multiple flags if the statistics met the flagging criteria:

* **Difficulty flags** indicated extreme values of the proportion-correct (for dichotomous items) or the proportion of the possible maximum points earned (for polytomous items):
* A-flag: A *p-*value below 0.50 for two-choice dichotomous single-select items, below 0.30 for three-choice dichotomous single-select items, or below 0.20 for all other items
* H-flag: A *p*-value above 0.95 for dichotomous items or above 0.80 for polytomous items
* A **discrimination flag** (R-flag) indicated that the item did not discriminate effectively between high- and low-ability students. Items with a polyserial correlation less than 0.20 were flagged.
* An **omit flag** (O-flag) indicated items with an omission rate above 5 percent.
* A **distractor flag** (P-flag) was used for an item with any distractors having a correlation with the criterion score that is either positive, zero, or negative but not significantly below zero.
* A **miskey flag** (D-flag) was used for multiple-choice (MC) items when more of the high-ability examinee group—the top 20 percent of examinees on the total assessment—choose any distractor rather than the response keyed as correct.
* An **underrepresented score point flag** (L-flag) was used for any item that had less than 3 percent of the students at any score level.

ETS’ Psychometric Analysis & Research staff and Assessment and Learning Technology Research & Development staff carefully reviewed each of the flagged items during and at the end of the item analyses. All flagged items were also reviewed by California educators at the data review meeting (DRM) and then summarized for the California Department of Education (CDE) with recommendations for subsequent analyses.

#### Classical Item Analysis Results

This subsection describes the results of the classical item analysis for the 2022–23 test items. Detailed results of the item analyses for each item by grade level and grade span are presented in [appendix 8.A](#_Alternative_Text_for_31).

Table 8.A.1 provides *p*-value and item-total correlation summary statistics for all grade levels and grade spans, by domain and by item type. Mean *p*-values ranged from 0.48 for grade span three through five Reading MC items, to 0.84 for grade spans six through eight and nine and ten Speaking. Mean item-total correlations ranged from 0.52 for grade spans nine and ten and eleven and twelve Reading dichotomous items to 0.86 for grade two Writing items. These mean *p-*values and item-total correlations are within acceptable ranges.

Table 8.A.2 through table 8.A.8 present *p*-value and item-total correlation summary statistics, for each grade level or grade span, by domain, item type, and task type. Average *p*-values ranged from 0.35 for the task type of *Read a Student Essay* in grade span three through five Reading to 0.94 for the task type of *Talk About a Scene* in grade span six through eight Speaking. Average item-total correlations ranged from 0.35 for grade one Listening task type *Listen to a Short Exchange;* to 0.92 for kindergarten Speaking task type *Retell a Narrative;* and kindergarten Speaking task type *Summarize an Academic Presentation*.

All summary classical item statistics were within acceptable ranges, and the minimum and maximum *p*-values indicated that task types represented item difficulties throughout the range of student proficiency.

The final set of tables in [appendix 8.A](#_Alternative_Text_for_31) present item-level classical item analysis statistics, including omit rates, for both operational and field test items. The tables are organized by grade level and grade span, for dichotomous and polytomous items. Table 8.A.9 through table 8.A.15 provide results for the dichotomous items, and table 8.A.16 through table 8.A.22 provide results for the polytomous items. The tables for polytomous items also include the percentage of students achieving each score point value.

ETS and the CDE coordinated DRMs so that all field test items flagged during classical item analysis and DIF could be reviewed by panels of California educators. The educators were provided with reasons as to why these items received statistical flags and then reviewed each item and determined whether to accept or reject the item. The number of items flagged and the resulting decisions are presented in table 8.2.

Table 8.2 Item Review Decisions for Flagged Field Test Items

|  |  |  |  |
| --- | --- | --- | --- |
| **Grade Level or Grade Span** | **Items Reviewed** | **Items Accepted** | **Items Rejected** |
| Kindergarten | 8 | 8 | 0 |
| 1 | 4 | 4 | 0 |
| 2 | 5 | 4 | 1 |
| 3–5 | 5 | 5 | 0 |
| 6–8 | 5 | 3 | 2 |
| 9–10 | 6 | 5 | 1 |
| 11–12 | 8 | 7 | 1 |
| **Totals:** | **41** | **36** | **5** |

### Differential Item Functioning Analyses

DIF is used to evaluate the consistency of individual item performance for students in different demographic student groups who have the same level of domain performance. For example, DIF evaluates whether female and male students matched to have the same test score perform similarly on each item in the assessment.

In examining the DIF between groups, the reference group is often designated as the group that is assumed to have an advantage, while the focal group refers to the group anticipated to possibly be disadvantaged by the assessment.

DIF analyses were conducted for field test items that met the sample size requirements. The sample size requirements for the DIF analyses were 100 in the smaller of either the focal group or the reference group and 400 in the combined focal and reference groups. These sample size requirements are based on standard operating procedures with respect to DIF analyses at ETS.

If an item performs differentially across identifiable student groups—for example, gender or ethnicity—when students are matched on ability, the item may be measuring something else other than the intended construct (i.e., possible evidence of bias). It is important, however, to recognize that item performance differences flagged for DIF might be related to actual differences in relevant knowledge or skills between student groups (i.e., impact) or statistical Type I error, which might falsely find DIF in an item. As a result, DIF analysis is used mainly as a statistical tool to identify *potential* item bias. Subsequent reviews by content experts and bias and sensitivity experts are required to determine the source and meaning of performance differences.

There are many possible reasons for DIF. The wording of an item, for example, may be such that one group interprets the question differently than the other, or the reading demands of an item are such that, although reading is not being measured (e.g., in a mathematics assessment), reading differences between the groups lead to differential outcomes on the item.

DIF analyses were conducted on each assessment for designated comparison groups. Groups are defined on the basis of demographic variables, such as gender, race or ethnicity, and primary disabilities, if the number of students in the group meets the sample size requirements. These comparison groups are specified in table 8.3.

Table 8.3 Student Groups for DIF Comparison

|  |  |  |
| --- | --- | --- |
| **DIF Type** | **Reference Group** | **Focal Group** |
| Gender | Male | Female |
| Ethnicity | Hispanic or Latino | Non-Hispanic or non-Latino |

#### Differential Item Functioning Procedure for Dichotomous Items

The Mantel-Haenszel (MH) DIF (MH-DIF) statistic was calculated for dichotomous items (Mantel & Haenszel, 1959; Holland & Thayer, 1985). For this method, students are classified into relevant student groups of interest (e.g., gender or ethnicity). Students at each total score level in the focal group (e.g., females) are compared with students at each total score level in the reference group (e.g., males). The common odds ratio—that is, the proportion of correct response over the proportion of incorrect response—is estimated across all levels of matched student ability using the formula in equation 8.4 (Dorans & Holland, 1993). The resulting estimate is interpreted as the relative probability of success on a particular item for members of two groups when matched on ability. *Refer to the* [*Alternative Text for Equation 8.4*](#_Alternative_Text_for_2) *for a description of this equation.*

 (8.4)

where,

*M* is the highest score category of the criterion score (total raw score),

*m* indexes the score categories,

*Rrm* is the number of students in the reference group at score level *m* who answer the item correctly,

*Wfm* is the number of students in the focal group at score level *m* who answer the item incorrectly,

*Ntm* is the total number of students at score level *m*,

*Rfm* is the number of students in the focal group at score level *m* who answer the item correctly, and

*Wrm* is the number of students in the reference group at score level *m* who answer the item incorrectly.

To facilitate the interpretation of MH results, the common odds ratio is frequently transformed onto the delta scale using equation 8.5 (Holland & Thayer, 1985). *Refer to the [Alternative Text for Equation 8.5](#_Alternative_Text_for_3) for a description of this equation.*

 (8.5)

Positive values indicate DIF in favor of the focal group (i.e., positive DIF items are differentially easier for the focal group), whereas negative values indicate DIF in favor of the reference group (i.e., negative DIF items are differentially easier for the reference group).

#### Differential Item Functioning Procedure for Polytomous Items

The standardization DIF (Dorans & Schmitt, 1993; Zwick, Thayer, & Mazzeo, 1997; Dorans, 2013) in conjunction with the Mantel chi-square statistic (Mantel, 1963; Mantel & Haenszel, 1959) is calculated for polytomous items. The standardized mean difference (SMD) compares the item means of the two groups after adjusting for differences in the distribution of students across all items and is calculated using equation 8.6. *Refer to the* [*Alternative Text for Equation 8.6*](#_Alternative_Text_for_35) *for a description of this equation.*

 (8.6)

where,

*M* is the highest score category of the criterion score (total raw score),

*Nfm* is the number of students in the focal group at score level *m*,

*Erm* is the expected item score for the reference group at score level *m*,

*Efm* is the expected item score for the focal group at score level *m*, and

*Dm* is the difference in the distribution of students at score level *m*.

These statistics are indicators of the degree to which members of one group perform better or worse than expected on each polytomous item.

A positive SMDvalue means that, conditional on the criterion score, the focal group has a higher mean item score than the reference group (i.e., the item is differentially easier for the focal group). In contrast, a negative SMD value means that, conditional upon the criterion score, the focal group has a lower mean item score than the reference group (i.e., the item is differentially harder for the focal group).

#### Classification

Based on the DIF statistic values and significance tests, items are classified into three categories and assigned values of A, B, or C (Holland & Wainer, 1993). Category A items contain negligible DIF, Category B items exhibit slight to moderate DIF, and Category C items possess moderate to large DIF values.

The flagging criteria for dichotomous items are presented in table 8.4; the flagging criteria for polytomous items are provided in table 8.5. The determination of all significant differences is based on *p*-value < 0.05.

Table 8.4 DIF Categories for Dichotomous Items

|  |  |
| --- | --- |
| **DIF Category** | **Criteria** |
| A (negligible) | * Absolute value of MH D-DIF is less than one or is not significantly different from zero. * Positive values are classified as “A+” and negative values as “A−.” |
| B (moderate) | * Absolute value of MH D-DIF is significantly different from zero but not from one and is at least one; *or* absolute value of MH D-DIF is significantly different from one but is less than 1.5. * Positive values are classified as “B+” and negative values as “B−.” |
| C (large) | * Absolute value of MH D-DIF is at least 1.5 and is significantly different from one. * Positive values are classified as “C+” and negative values as “C−.” |

Table 8.5 DIF Categories for Polytomous Items

|  |  |
| --- | --- |
| **DIF Category** | **Criteria** |
| A (negligible) | Mantel chi-square *p-*value≥ 0.05 or |SMD/SD| ≤ 0.17 |
| B (moderate) | Mantel chi-square *p-*value *<* 0.05 and 0.17 < |SMD/SD| ≤ 0.25 |
| C (large) | Mantel chi-square *p-*value *<* 0.05 and |SMD*/*SD| > 0.25 |

**Note:** SMD = standardized mean difference; SD = total group standard deviation of item score

#### Differential Item Functioning Analysis Results

Results of the DIF analyses are presented in [appendix 8.B](#_Appendix_8.B:_Differential). Table 8.B.1 and table 8.B.2 provide the number of items in each DIF classification, for each grade level and grade span, by domain, for gender and ethnicity.

One field test item, linked to ethnicity, was flagged for C-DIF. That item is identified in table 8.B.3. This item was reviewed by the CDE and California educators at the 2023 DRM; it was accepted for operational usage. An independent DIF panel at ETS also reviewed the item and confirmed it was not biased.

### Item Response Theory Analyses

IRT is a family of mathematical models that characterizes the probability of a given response as a function of a test taker’s true ability and one or more features of the items, such as its difficulty or discrimination. IRT can be used to calibrate items, link item parameter estimates, scale or equate test scores across different forms or test administrations, evaluate item performance, build an item bank, and assemble test forms.

This section describes how IRT models were used to calibrate and link field test items onto the base IRT scale established during the 2022–23 administration. Only items that were not rejected by both the data review committees and the CDE were included in the calibration process.

#### Item Response Theory Model

The two-parameter logistic item response theory (2PL-IRT) model was used to calibrate the dichotomous items (i.e., items worth 1 point) and the generalized partial credit model (GPCM) (Muraki, 1992) was used to calibrate the polytomous items (i.e., items worth more than 1 point). The 2PL-IRT model is a special case of the GPCM when the maximum number of score points for the item is 1. FlexMIRT® (Cai, 2017), a multilevel and multiple-group IRT software package, was used for the calibration.

The mathematical form of the GPCM is presented in equation 8.7. *Refer to the* [*Alternative Text for Equation 8.7*](#_Alternative_Text_for_5) *for a description of this equation.*

 (8.7)

where,

 is the probability of student with proficiency  obtaining score *h* on item *i*,

*Mi* is the maximum number of score points for item *i*,

*ai* is the discrimination parameter,

*bi* is the location parameter for item *i*,

*div* is the category parameter for item *i* on item score *v*,

*D* is a scaling constant of 1.7,

*c* indexes the item score, and

*v* indexes the non-zero item score.

When *Mi* = 1, equation 8.7 becomes an expression of the two-parameter logistic model for dichotomous items.

#### Data Preparation

Prior to IRT calibration analyses, ETS’ psychometricians reviewed the results of the classical item analyses to decide whether any items were of poor quality and needed to be removed from calibration. The results also were reviewed by ETS content experts and the CDE. The decision whether to remove items from calibration was made in consultation with the CDE.

For IRT calibration, scored item response data was used to create the IRT analysis input data files for each grade level.

Similar to the classical item analyses, “omit” items were treated as incorrect and “not presented” items were treated as blank.

#### Equating

Equating is a procedure where test scores, from different test forms assembled on the basis of the same specifications, are placed onto a reference scale so that scores from different test administrations are comparable. There are two approaches to equate the test forms: preequating and postequating.

A preequating design allows for conversion tables that describe the relationship between raw scores and scale scores, or theta scores and scale scores, to be established prior to the current test administration using data from prior administrations. Preequating relies on having a well-calibrated item bank, robust embedded field-testing processes, and stability in item performance over time.

A postequating design uses the data from the current administration to establish the raw-to-scale-score relationship for the current administration’s form.

Both preequating and postequating involve a common‑item nonequivalent groups design (Kolen & Brennan, 2004).

For all assessments, regardless of whether they are preequated or postequated, IRT calibration and linking were conducted to put the field test item parameters onto the base IRT scale.

The Summative ELPAC was preequated to the base scale established in the 2017–18 administration. All operational items have parameters that were already linked to the base scale through the field testing from administrations prior to the current administration. For detailed information on the method to establish the raw score to scale relationship, refer to subsection [*8.4.6* *Scaling the Scores*](#_Toc128558690)*.*

#### Calibration and Linking for the Field Test Items

After each administration, the field test items will be calibrated and linked to the base scale.

##### Calibration

The calibration will be conducted using a sparse matrix combining all operational items and field test items from all versions of the forms within a grade level or grade span.

FlexMIRT (Cai, 2017), a multilevel and multiple-group IRT software package for item analysis and test scoring, was used for item calibration analysis. This software can fit a variety of IRT models to both single-level and multilevel data that are dichotomous, polytomous, or both, and was chosen for its superior flexibility among IRT software programs.

The evaluation of the calibration results includes the following steps:

1. Reviewing the item parameter estimates to examine whether these estimates were reasonable
   1. At the form level, the summary statistics for the *b*-parameter estimates (location difficulty) and *d*-parameter estimates (step difficulty) were examined, including the mean, SD, median, minimum, maximum, and goodness-of-fit.
   2. At the item level, statistics of individual items were examined, including item difficulty estimates, model-fit statistics, and the IRT-based item parameters.
2. Flagging items that did not perform as expected (All flagged items were discussed thoroughly with the CDE to decide whether those items should be removed from calibration or whether the scoring categories need to be collapsed.)

The calibration process was paralleled by two ETS psychometricians to ensure quality and accuracy of results. Specifically, two psychometricians independently created flexMIRT control files and ran the same input data files and then compared the calibration results. Any differences in the output were investigated. Refer to section [*9.6 Quality Control of Psychometric Processes*](#_Quality_Control_of_5)for more details of this procedure.

##### Linking

The item parameters obtained through the calibration are on a different scale and will be linked to the baseline scale using all operational items as anchors.

The Stocking-Lord (1983) method will be applied for the linking. The software STUIRT (Kim & Kolen, 2004) is employed to find the Stocking-Lord linking constants for the common items. The stability of the anchor items will be evaluated by means of item response functions (IRFs) and a d-square measure. The d-square measure is the weighted squared deviation of the IRFs across the range of proficiency (i.e., theta or ) and under a hypothetical normal distribution for *θ* between the item parameter estimates from the calibration and the equated values. For a given item , the measure  or “d-squared” is defined as follows. *Refer to the* [*Alternative Text for Equation 8.8*](#_Alternative_Text_for_6) *for a description of this equation.*

(8.8)



where,

*i* indexes common or anchor items,

*k* indexes quadrature points for ,

*si,new* is the expected item score for item *i* under the calibration of operational items from the current administration,

while *si,bank* is the expected item score for item *i* based on the item bank parameter estimates, and

*g(θk)* are weights for each of the *k* quadrature points *θk*.

The magnitude of d-square in conjunction with plots of these curves are used to identify items for removal from the anchor set. The frequently used minimum d-squared criteria for anchor item removal are 0.1252 for dichotomous items and 0.22 for polytomous items. For anchor items with d-squared results that are at the borderline of these thresholds, the evaluation will be made on an individual basis.

#### Parameter Estimates

IRT analyses are conducted separately for the oral language and written language composites; consequently, parameter estimates are reported separately for each composite. The overall summary of the IRT *a*-value (discrimination) parameter estimates—refer to equation 8.7—used on the 2022–23 Summative ELPAC oral language and written language skills assessments are shown in table 8.6 and table 8.7, respectively. The mean, SD, minimum, and maximum values are presented, in addition to the number of items for each domain.

Table 8.6 IRT *a*-values Summary Statistics for Oral Language Skill by Grade Level or Grade Span

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Grade Level or Grade Span** | **Domain** | **N Items** | **Mean** | **SD** | **Minimum** | **Maximum** |
| Kindergarten | Listening | 20 | 0.59 | 0.14 | 0.37 | 0.90 |
| Kindergarten | Speaking | 9 | 1.17 | 0.27 | 0.81 | 1.65 |
| 1 | Listening | 22 | 0.50 | 0.23 | 0.21 | 1.07 |
| 1 | Speaking | 9 | 1.20 | 0.22 | 1.00 | 1.69 |
| 2 | Listening | 22 | 0.47 | 0.20 | 0.19 | 0.92 |
| 2 | Speaking | 12 | 0.95 | 0.27 | 0.57 | 1.35 |
| 3–5 | Listening | 22 | 0.39 | 0.16 | 0.13 | 0.72 |
| 3–5 | Speaking | 12 | 0.81 | 0.16 | 0.60 | 1.10 |
| 6–8 | Listening | 22 | 0.32 | 0.12 | 0.05 | 0.60 |
| 6–8 | Speaking | 12 | 0.72 | 0.14 | 0.49 | 1.09 |
| 9–10 | Listening | 22 | 0.24 | 0.09 | 0.09 | 0.42 |
| 9–10 | Speaking | 12 | 0.66 | 0.18 | 0.44 | 1.06 |
| 11–12 | Listening | 22 | 0.26 | 0.09 | 0.10 | 0.42 |
| 11–12 | Speaking | 12 | 0.70 | 0.25 | 0.48 | 1.26 |

Table 8.7 IRT *a*-values Summary Statistics for Written Language Skill by Grade Level or Grade Span

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Grade Level or Grade Span** | **Domain** | **N Items** | **Mean** | **SD** | **Minimum** | **Maximum** |
| Kindergarten | Reading | 14 | 0.64 | 0.31 | 0.32 | 1.37 |
| Kindergarten | Writing | 8 | 1.45 | 0.27 | 1.03 | 1.72 |
| 1 | Reading | 21 | 0.88 | 0.13 | 0.65 | 1.10 |
| 1 | Writing | 7 | 0.83 | 0.21 | 0.59 | 1.10 |
| 2 | Reading | 26 | 0.83 | 0.36 | 0.19 | 1.43 |
| 2 | Writing | 6 | 0.84 | 0.21 | 0.59 | 1.16 |
| 3–5 | Reading | 26 | 0.53 | 0.31 | 0.08 | 1.39 |
| 3–5 | Writing | 6 | 0.80 | 0.17 | 0.63 | 1.02 |
| 6–8 | Reading | 26 | 0.44 | 0.14 | 0.22 | 0.76 |
| 6–8 | Writing | 6 | 0.67 | 0.12 | 0.54 | 0.83 |
| 9–10 | Reading | 26 | 0.38 | 0.15 | 0.18 | 0.69 |
| 9–10 | Writing | 6 | 0.62 | 0.12 | 0.51 | 0.83 |
| 11–12 | Reading | 26 | 0.38 | 0.21 | 0.04 | 0.95 |
| 11–12 | Writing | 6 | 0.64 | 0.10 | 0.51 | 0.77 |

Overall summaries of IRT *b*-value (item difficulty) parameter estimates are shown in table 8.8 and table 8.9 for the Summative ELPAC oral language and written language skills assessments. The mean, SD, minimum, and maximum values, as well as the number of items for each domain, are presented.

Table 8.8 IRT *b*-values Summary Statistics for Oral Language Skill by Grade Level or Grade Span

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Grade Level or Grade Span** | **Domain** | **N Items** | **Mean** | **SD** | **Minimum** | **Maximum** |
| Kindergarten | Listening | 20 | −2.41 | 1.00 | −4.21 | −0.41 |
| Kindergarten | Speaking | 9 | −2.79 | 0.79 | −3.51 | −1.53 |
| 1 | Listening | 22 | −2.72 | 1.18 | −4.77 | 0.45 |
| 1 | Speaking | 9 | −2.38 | 0.84 | −3.14 | −0.82 |
| 2 | Listening | 22 | −2.12 | 0.91 | −3.73 | −0.50 |
| 2 | Speaking | 12 | −2.40 | 0.79 | −3.46 | −0.94 |
| 3–5 | Listening | 22 | −2.03 | 1.29 | −3.97 | 1.41 |
| 3–5 | Speaking | 12 | −1.83 | 0.58 | −2.67 | −0.98 |
| 6–8 | Listening | 22 | −1.75 | 1.31 | −3.98 | 1.00 |
| 6–8 | Speaking | 12 | −1.60 | 1.00 | −3.13 | −0.22 |
| 9–10 | Listening | 22 | −1.41 | 2.07 | −5.40 | 2.56 |
| 9–10 | Speaking | 12 | −1.77 | 0.72 | −2.92 | −0.55 |
| 11–12 | Listening | 22 | −1.07 | 1.22 | −3.68 | 1.21 |
| 11–12 | Speaking | 12 | −1.64 | 0.82 | −3.00 | −0.28 |

Table 8.9 IRT *b*-values Summary Statistics for Written Language Skill by Grade Level or Grade Span

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Grade Level or Grade Span** | **Domain** | **N Items** | **Mean** | **SD** | **Minimum** | **Maximum** |
| Kindergarten | Reading | 14 | −4.53 | 0.53 | −5.29 | −3.83 |
| Kindergarten | Writing | 8 | −3.95 | 0.47 | −4.88 | −3.50 |
| 1 | Reading | 21 | −2.32 | 0.58 | −3.25 | −1.42 |
| 1 | Writing | 7 | −2.62 | 1.01 | −4.66 | −1.87 |
| 2 | Reading | 26 | −1.93 | 0.66 | −3.25 | 0.22 |
| 2 | Writing | 6 | −1.67 | 0.21 | −1.88 | −1.31 |
| 3–5 | Reading | 26 | 0.41 | 1.90 | −1.96 | 7.88 |
| 3–5 | Writing | 6 | −0.76 | 0.48 | −1.33 | −0.12 |
| 6–8 | Reading | 26 | 0.45 | 0.94 | −1.30 | 3.06 |
| 6–8 | Writing | 6 | −0.41 | 0.59 | −1.22 | 0.37 |
| 9–10 | Reading | 26 | 0.66 | 0.80 | −0.58 | 2.17 |
| 9–10 | Writing | 6 | −0.21 | 0.49 | −0.95 | 0.44 |
| 11–12 | Reading | 26 | 1.56 | 2.62 | −1.33 | 11.37 |
| 11–12 | Writing | 6 | −0.21 | 0.62 | −0.93 | 0.71 |

The summary of the IRT *b*-values, as shown in table 8.8 for the oral language assessments and table 8.9 for the written language assessments, indicate that both composite assessments tended to have increased test difficulty across the grade levels and grade spans.

Table 8.6 through table 8.9 provide summary statistics for operational item parameter estimates only. Note that these parameter estimates are on a vertical scale, which makes *b-‍*parameter values lower for grade levels below grade span three through five and higher for grade spans above grade span three through five. IRT parameter estimates for the operational and field test items are provided in [appendix 8.C](#_Appendix_8.C:_Item_1), table 8.C.1 through table 8.C.14. IRT parameter estimates for operational and field test items were within acceptable ranges, with three exceptions:

For the oral language composite,

* one field test item in grades span six through eight has a *b*-parameter estimate of 15.34 and an *a*-parameter of 0.01. This item will not be selected for use in future forms.

For the written language composite, two items were identified.

* One field test item in grade span nine and ten had a *b*-parameter estimate of 24.19 and an *a*-parameter of 0.02. This item will not be selected for use in future forms.
* One operational item in grade span eleven and twelve had a *b-*parameter of 11.37 and an *a*-parameter of 0.04. This item is being retained for potential use in future forms because it is part of an item set.

Distributions of the IRT parameter estimates for the operational items in each domain, by grade level and grade span, are provided in table 8.C.15 through table 8.C.18 in [appendix 8.C](#_Appendix_8.C:_Item_1). Table 8.C.15 and table 8.C.16 report the distributions for the Listening and Speaking domains in the oral language composite. Table 8.C.17 and table 8.C.18 present the results for the Reading and Writing domains in the written language composite. Finally, table 8.C.19 and table 8.C.20 contain the data to create the test characteristic curves (TCCs) for the oral language and written language composites in figure 8.C.1 and figure 8.C.2, respectively.

#### Scaling the Scores

The raw scores on each new form were transformed to scale scores on the reference scale using a two-step procedure. First, the number-correct scores (raw scores) were transformed to ability (theta) scores on the reference scale by the inverse TCC procedure described in the next subsection. Then, these ability (theta) scores were transformed to scale scores through the linear transformation described in subsection [*8.4.6.2 Transformation from Theta Scores to Scale Scores*](#_Transformation_from_Theta_1).

##### Inverse Test Characteristic Curve Procedure

After all the item difficulty estimates are transformed to the reference scale, students’ overall ability estimates can be derived from the input data file that was described in subsection [*8.4.2 Data Preparation*](#_Data_Preparation_1)*,* through the IRT inverse TCC method (Stocking, 1996). This method transforms the sum of the student’s item scores into an ability estimate. That estimate is the ability value that makes the sum of the expected scores on the items administered to the student equal to the sum of the scores that the student actually received on those items.

The TCC expresses the expected total score on a set of items as a function of the student’s ability, which is shown in equation 8.9. *Refer to the* [*Alternative Text for Equation 8.9*](#_Alternative_Text_for_39) *for a description of this equation.*

 (8.9)

where,

*i* indexes dichotomous items,

*j* indexes polytomous items,

*ndich* is the number of dichotomous items in the assessment,

*pi(θ)* is the probability of a correct response to item *i* at ability *θ* on the dichotomous item in equation 8.7,

*npoly* is the number of polytomous items in the assessment,

*m* is the number of score categories for each polytomous item,

*sxj* is the value for score category x for the polytomous item *j*,

*pxj(θ)* is the probability that an examinee with ability *θ* obtains score sx on the polytomous item *j* in equation 8.7, and

*ξ(θ)* is the corresponding expected total score.

##### Transformation from Theta Scores to Scale Scores

Table 8.10 contains the slope and intercept used to linearly transform vertically scaled theta scores to scale scores for the oral and written measures.

Table 8.10 Parameters for Transforming Vertically Linked Thetas to Scale Scores

|  |  |  |
| --- | --- | --- |
| **Variable** | **Oral** | **Written** |
| Slope | 41.602381083 | 38.871116151 |
| Intercept | 508.71944305 | 512.11884788 |

### Response Time Analyses

Response time analyses are conducted at the item level and the total test level. At the item level, timing information was collected by the delivery platform for each “page” (screen) that was presented to test takers. Information about the time required to respond to a single item is available for items that appear on a page alone. The time required to respond to all items on a page is available when multiple items appear on a page. At the total test level, response times are calculated by summing the page durations for all items in the Summative ELPAC.

Table 8.D.1 in [appendix 8.D](#_Appendix_8.D:_Response_1) provides summary statistics of response times for the Summative ELPAC, at the first, tenth, twenty-fifth, fiftieth, seventy-fifth, ninetieth, and ninety-ninth percentiles. Total test response times calculated for the fiftieth and ninetieth percentiles provide local educational agency administrators with an indicator of how much time students required on average, as well as how much time might be needed for students who require more time.

Four ranges of test performance were identified, and testing time was summarized for each range. The minimum testing time was less than one minute for grade one students with scores in the lowest score range. The median testing time for students in each score range varied from about 25 minutes to about two hours. With a few exceptions, students in the higher score range (i.e., higher total raw scores) spent more time on the assessments than their peers in lower score ranges. Exceptions were for kindergarten through grade two students in the highest score range, who spent slightly less time than students in the next highest score range.

### Reliability Analyses

The reliability for a particular group of students’ test scores is the extent to which the scores would remain consistent if those same students were retested with a parallel version of the same assessment. There are many definitions of reliability (Haertel, 2006) that have their genesis in classical test theory and a variety of methods that can be used to estimate reliability.

The general concept of reliability concerns the extent to which the test scores measure *a particular construct* consistently. The variance in the distribution of test scores—essentially, the observed differences among individuals—is partly due to differences that are consistent and partly due to differences that are not consistent. The measure of variation associated with the first kind of differences—consistent differences—is called “true variance”; this would include actual differences in students’ knowledge. The measure of variation associated with the remaining differences—those that operate essentially at random—is called “error variance.” Error variance includes a variety of underlying differences such as selections of test content, which may cause a student’s test score to be slightly higher in one evaluation and slightly lower in another. Reliability is the proportion of total variance that is due to true variance. The standard error of measurement (SEM) is a statistic that characterizes the error variance.

Reliability coefficients range from zero to one. The higher the reliability coefficient for a set of scores, the more likely individuals are to obtain very similar scores upon repeated testing occasions, if the students do not change in their level of the knowledge or skills measured by the assessment.

#### Sample for Reliability Analyses

The reliability analyses performed for the ELPAC require that the sample be screened using the requirements listed in subsection [*8.1.2 Samples Used for Analyses*](#_Samples_Used_for).

#### Reliability Measures

The reliability coefficient cannot, in fact, be computed directly unless the student actually takes two parallel versions of the same assessment. However, with some reasonable assumptions, reliability can be estimated from the students’ responses to a single version of the assessment.

Like other statistics, the reliability coefficient can vary substantially from one group of students to another. It tends to be larger in groups that are more diverse in the ability measured by the assessment and smaller in groups that are more homogeneous in the ability measured.

The ELPAC test reliabilities were evaluated for each domain, for composite scores, or for item types as dichotomous items and polytomous items, using coefficient alpha (Cronbach, 1951) index of internal consistency, which is calculated as presented in equation 8.10.

*Refer to the* [*Alternative Text for Equation 8.10*](#_Alternative_Text_for_30) *for a description of this equation.*

 (8.10)

where,

*I* is the number of items on test form,

 is the estimated variance of item *i*, and

 is the estimated raw score variance.

The reliability of the overall score was estimated by substituting sample estimates into the following definitional formula for composite reliability (Feldt & Brennan, 1989), equation 8.11. *Refer to the* [*Alternative Text for Equation 8.11*](#_Alternative_Text_for_13) *for a description of this equation.*

 (8.11)

where,

*C* is the total number of components,

 is the weight of the *c*th component in forming the overall score,

 is the variance of scores on the *c*th component,

 is the reliability of scores on the *c*th component as calculated in equation 8.10, and

 is the variance of the overall score.

#### Reliability Estimates

##### Overall Reliability Estimates

The results of the reliability analyses for the overall Summative ELPAC scores, for all students within each grade level, are presented in the *Overall Score Alpha* column of table 8.E.8, in [appendix 8.E](#_Appendix_8.E:_Reliability_1). Corresponding results, aggregated by student groups, are also presented in the *Overall Score Alpha* column, in table 8.E.9 through table 8.E.21. The results shown in table 8.E.8 indicate that the reliability estimates for all summative assessment total scores across grade levels are within acceptable ranges, from 0.92 to 0.94.

When the analysis was conducted by student groups within each grade level, the lowest reliability estimate observed was 0.88 for Filipino students in grade eleven (table 8.E.20). The highest estimate was 0.95, which was observed in several student groups and grade levels. Reliability estimates of domains and composites, as well as decision accuracy and consistency reliability estimates, are discussed in the next subsections.

##### Domain and Composite Reliability Estimates

The results of reliability analyses for the four domain scores and two composite scores are also presented in table 8.E.8. The reliability estimates for each domain of the assessment were moderate to high, ranging from 0.72 for grade one Listening to 0.91 for kindergarten Writing and grade ten Speaking. Most of the estimates were in the range of 0.80 to 0.91.

Speaking and Writing domains had somewhat higher reliability estimates than the Listening and Reading domains. For the oral language and written language composite scores, the reliability estimates were moderate to high, ranging from 0.85 for grade one oral language to 0.91 for a few grades in oral language; and ranging from 0.87 for several grades in written language to 0.92 for a few other grades in written language.

#### Standard Error of Measurement

The SEM is a measure of how much students’ scores vary from the scores they would earn on a perfectly reliable assessment. If it were possible to compute the error of measurement for each student’s score in a large group of students, these errors of measurement would have a mean of zero. These SEMs are an indication of how much the errors of measurement affect the students’ scores. The SEM is expressed in the same units as the test score, whether the units are in raw score or scale score metric. In a large group of students, approximately two-thirds of the students will earn scores within one SEM of the scores they would earn on a perfectly reliable assessment.

The SEM is the square root of the error variance in the scores, that is, the SD of the distribution of the differences between students’ observed scores and their true scores.

The SEM of oral language is calculated using equation 8.12. *Refer to the* [*Alternative Text for Equation 8.12*](#_Alternative_Text_for_14) *for a description of this equation.*

 (8.12)

where,

 is the reliability estimated in equation 8.10 for the composite scores of oral language, and

 is the SD of the oral language composite scores.

The SEM of written language is calculated using equation 8.13. *Refer to the* [*Alternative Text for Equation 8.13*](#_Alternative_Text_for_17) *for a description of this equation.*

 (8.13)

where,

 is the reliability estimated in equation 8.10 for the composite scores of written language, and

 is the SD of the written language composite scores.

For grades one through twelve, the SEM for the overall score is calculated using equation 8.14.[*Refer to the Alternative Text for Equation 8.14*](#_Alternative_Text_for_40) *for a description of this equation.*

 (8.14)

For kindergarten, equation 8.15 is used to calculate the SEM. *Refer to the* [*Alternative Text for Equation 8.15*](#_Alternative_Text_for_18) *for a description of this equation.*

 (8.15)

The SEM can be calculated for either raw scores or scale scores. The range of raw score standard errors for the Summative ELPAC was between 1.27 and 3.66 points across all grade levels, domains, composites, and overall score. In general, this translated into an error band of about two raw score points in most domains. For example, if a student received a raw score of 25 with a standard error of 2.00 points, upon retesting, the student would be expected to obtain a score between 23 and 27 about two-thirds of the time.

These SEM values are shown in table 8.11.

Table 8.11 SEM Based on Classical Test Theory

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Grade Level** | **SEM—Listening Raw Score** | **SEM—Speaking Raw Score** | **SEM—Reading Raw Score** | **SEM—Writing Raw Score** | **SEM—Oral Language Raw Score** | **SEM—Written Language Raw Score** | **SEM—Overall Raw Score** |
| K | 2.17 | 2.19 | 1.70 | 1.27 | 3.37 | 2.24 | 2.45 |
| 1 | 2.44 | 2.01 | 2.18 | 1.75 | 3.37 | 3.07 | 2.28 |
| 2 | 2.09 | 2.29 | 2.29 | 1.55 | 3.29 | 3.11 | 2.26 |
| 3 | 1.88 | 2.48 | 2.23 | 1.48 | 3.39 | 2.90 | 2.23 |
| 4 | 1.76 | 2.38 | 2.20 | 1.46 | 3.21 | 2.84 | 2.15 |
| 5 | 1.66 | 2.31 | 2.16 | 1.43 | 3.09 | 2.76 | 2.07 |
| 6 | 1.88 | 2.35 | 2.30 | 1.48 | 3.22 | 2.92 | 2.17 |
| 7 | 1.80 | 2.39 | 2.26 | 1.49 | 3.24 | 2.90 | 2.17 |
| 8 | 1.73 | 2.35 | 2.22 | 1.48 | 3.17 | 2.86 | 2.13 |
| 9 | 1.95 | 2.67 | 2.31 | 1.58 | 3.66 | 3.03 | 2.38 |
| 10 | 1.89 | 2.49 | 2.28 | 1.56 | 3.45 | 2.98 | 2.28 |
| 11 | 1.96 | 2.44 | 2.25 | 1.49 | 3.40 | 2.93 | 2.25 |
| 12 | 1.97 | 2.39 | 2.25 | 1.51 | 3.38 | 2.95 | 2.24 |

It is important to remember that assessments are not perfectly reliable and only offer an estimate of what the student is capable of in a specified domain. As shown in table 8.12, the average SEM scale score values for oral language and written language skills were about 27 and 20 scale score points, respectively; the average SEM scale score for the overall assessment was about 17 scale score points.

Table 8.12 SEM Based on Scale Score

|  |  |  |  |
| --- | --- | --- | --- |
| **Grade Level** | **SEM—Oral Language** | **SEM—Written Language** | **SEM—Overall** |
| Kindergarten | 24.05 | 31.99 | 19.38 |
| 1 | 24.67 | 20.67 | 16.09 |
| 2 | 21.56 | 17.87 | 14.00 |
| 3 | 21.06 | 15.79 | 13.16 |
| 4 | 23.03 | 16.56 | 14.18 |
| 5 | 24.76 | 17.55 | 15.17 |
| 6 | 25.51 | 17.57 | 15.49 |
| 7 | 27.53 | 18.09 | 16.47 |
| 8 | 29.05 | 18.63 | 17.26 |
| 9 | 31.46 | 20.04 | 18.65 |
| 10 | 32.79 | 20.27 | 19.27 |
| 11 | 29.50 | 21.89 | 18.37 |
| 12 | 30.08 | 21.89 | 18.60 |
| **Average:** | 26.54 | 19.91 | 16.62 |

#### Intercorrelations and Reliabilities for Domain Scores

Intercorrelations provide information on whether students’ performance in one domain corresponds to their performance in other domains. For an assessment like the Summative ELPAC, which reports multiple scores, the expectation is that those correlations not be too strong because very strong correlations would imply that a single score is sufficient. Intercorrelations for the domains are presented in table 8.E.1 through table 8.E.7 in [appendix 8.E](#_Appendix_8.E:_Reliability_1).

The reliability estimates for domain, composite, and overall scores are presented in table 8.E.8. The reliability estimates vary significantly across domains according to both the number of items and the types of content standards that are included in each domain. Reliability is higher for the overall scores than for the domain scores because the number of items in each domain was lower than the overall assessment.

The correlation coefficients range from 0.48 to 0.75. Three pairs of domains were associated with the lowest correlations: Reading and Listening grade one, Reading and Speaking grade span three through five, and Reading and Speaking grade span eleven and twelve. Three pairs of domains were also associated with the highest correlations: Reading and Listening kindergarten, Reading and Writing grade one, and Reading and Writing grade two. These values were slightly higher than the coefficients estimated for data from the previous operational administration of the Summative ELPAC in 2021–22, likely because of slightly increased reliability for 2022–23 test forms.

As presented in table 8.E.8, in kindergarten through grade two, Reading or Writing shows the highest reliability across domains, with a range of 0.89 to 0.91. In grades three through twelve, Speaking had the highest reliabilities, ranging from 0.87 to 0.91. Listening had the lowest reliabilities from kindergarten through grade ten.

#### Student Group Reliabilities

Reliabilities for total test scores, composite scores, and for domain scores are reported for each student group analysis. Table 8.E.9 through table 8.E.21 in [appendix 8.E](#_Appendix_8.E:_Reliability_1) present the overall test reliabilities for student groups defined by student gender, race or ethnicity, economic status, disability status, migrant status, military status, homeless status, and foster youth status.

For the composite and overall scores that are reported to students, most student groups across grade levels and domains exhibited reasonably high reliability of 0.85 or higher.

Reliabilities tended to be relatively low for students who were Filipino, had military status, or were foster youth.

Note that the reliabilities are not reported for samples that comprise 10 or fewer students, based on the data suppression rule. These are presented in the tables as “N/A.”

#### Conditional Standard Errors of Measurement

Classical test theory assumes that the standard error of a test score is constant throughout the score range. While the assumption is probably reasonable in the mid-score ranges, it is less reasonable at the extremes of the score distribution. IRT expands the concept by providing estimates of the standard error at each score point on the distribution.

##### Methodology

Conditional standard errors of measurement (CSEMs) are estimated as part of the IRT-based scoring procedure. CSEMs for scale scores are based on IRT and are estimated as a function of measured ability. The CSEMs of theta scores (or of linearly transformed theta scores) are smaller at points of the scale in the test metric where more items are located. A student’s CSEM under the IRT framework is equal to the reciprocal of the square root of the test information function based on the items taken by each student. The CSEM for a student with proficiency  is calculated using equation 8.16. *Refer to the* [*Alternative Text for Equation 8.16*](#_Alternative_Text_for_19) *for a description of this equation.*

 (8.16)

where,

 is the test information for student *j* and is calculated using equation 8.17. *Refer to the* [*Alternative Text for Equation 8.17*](#_Alternative_Text_for_24) *for a description of this equation.*

 (8.17)

where,

*I* is the number of items on the test form, and

 is the item information of item *i* for student *j*.

Item information is calculated as presented in equation 8.18. *Refer to the* [*Alternative Text for Equation 8.18*](#_Alternative_Text_for_25) *for a description of this equation.*

 (8.18)

where,

 and  are the first and second order moments of the item score for item *i* for a student with theta score .

The expected score of item *i* for student *j* is calculated as presented in equation 8.19. *Refer to the* [*Alternative Text for Equation 8.19*](#_Alternative_Text_for_26) *for a description of this equation.*

 (8.19)

The expected squared score of item *i* for student *j* is calculated as presented in equation 8.20. *Refer to the* [*Alternative Text for Equation 8.20*](#_Alternative_Text_for_27) *for a description of this equation.*

 (8.20)

where,

is the probability of a student with proficiency  obtaining score *h* on item *i*, the computation of which is shown in equation 8.7; and

*Mi* is the maximum number of score points for item *i*.

CSEMs for scale scores are computed by transforming CSEMs of theta scores onto the reporting scale. Refer to subsection [*8.4.6.2* *Transformation from Theta Scores to Scale Scores*](#_Transformation_from_Theta_1)for scaling procedures. A student’s CSEM for scale scores under the IRT framework is equal to the CSEM for the theta score multiplied by the scaling factor *A*, as presented in equation 8.21. *Refer to the* [*Alternative Text for Equation 8.21*](#_Alternative_Text_for_37) *for a description of this equation.*

 (8.21)

where,

 is the CSEM on the scale score metric for student *j*;

 is the CSEM on the theta score metric for student *j* estimated in equation 8.16;

 is the  test information for student *j* as calculated in equation 8.17; and

*A* is the scaling factor (the slope) needed to transform theta to the scale score metric.

##### Results

IRT’s version of an SEM has values that vary by score point. CSEM values are reported as part of the raw-score-to-scale-score conversion tables presented in table 7.B.1 through table 7.B.22 of [appendix 7.B](#_Appendix_7.B:_Raw-to-Scale-Score) for oral language and written language skills.

CSEMs vary across the score scale and are typically smaller toward the center of the scale where more items are located and typically larger at the extreme ends of the scale. For most grade levels and grade spans, the lowest values of CSEM are between the proficiency levels one and two; the threshold scores between proficiency levels one and two are toward the middle of the scale score ranges. The CSEMs for threshold scores between proficiency levels three and four are somewhat larger.

#### Decision Classification Analyses

When an assessment uses performance levels as the primary method to report test results, accuracy and consistency of decisions become key indicators of the quality of the assessment.

##### Methodology

The reliabilities of performance-level classifications, which are criterion referenced, are related to the reliabilities of the test scores on which they are based; however, they are not exactly the same. Glaser (1963) was among the first to draw attention to this distinction, and Feldt and Brennan (1989) reviewed the topic extensively. While test reliability evaluates the consistency of test scores, decision classification reliability evaluates the consistency of classification.

Decision accuracy is the extent to which students are classified in the same way as they would be if each student’s score were the average over all possible forms of the assessment (the student’s true score). Decision accuracy answers the following question: How closely does the actual classification of test takers, based on their single-form scores, agree with the classification that would be made on the basis of their true scores, if their true scores could somehow be known?

Decision consistency is the extent to which students are classified in the same way as they would be on the basis of a single form of an assessment other than the one for which data is available. Decision consistency answers the following question: What is the agreement between the classifications based on two nonoverlapping, equally difficult forms of the assessment?

The methodology used for estimating the reliability of classification decisions is described in Livingston and Lewis (1995). The necessary input information includes only the maximum and minimum possible scores on the assessment and the observed score distribution and the reliability coefficient for the group of students referenced by the estimates. The method was implemented by the ETS proprietary computer program RELCLASS-COMP (Version 4.14).

Reliability of classification at a threshold is estimated by combining the performance levels above a particular threshold and combining the performance levels below that threshold. The result is a two-by-two table indicating whether the students are above or below the threshold. The sum of the entries in the main diagonal is the number of students accurately (or consistently) classified as above or below that threshold.

Table 8.13 and table 8.14 illustrate these two-by-two contingency tables. The proportion of students being accurately classified is determined by summing across the diagonals of the upper tables. The proportion of consistently classified students is determined by summing the diagonals of the lower tables.

Table 8.13 Decision Accuracy for Reaching a Performance Level

|  |  |  |
| --- | --- | --- |
| **Performance Level Status** | **Does Not Reach a Performance Level Based on True Score** | **Reaches a Performance Level Based on True Score** |
| Does not reach a performance level | Correct classification | Incorrect classification |
| Reaches a performance level | Incorrect classification | Correct classification |

Table 8.14 Decision Consistency for Reaching a Performance Level

|  |  |  |
| --- | --- | --- |
| **Performance Level Status** | **Does Not Reach a Performance Level Based on an Alternate Form** | **Reaches a Performance Level Based on an Alternate Form** |
| Does not reach a performance level | Consistent classification | Inconsistent classification |
| Reaches a performance level | Inconsistent classification | Consistent classification |

##### Results

The results of decision accuracy and consistency at each threshold proficiency level for each language composite, as well as for overall scores, are presented in table 8.F.1 through table 8.F.7 in [appendix 8.F](#_Appendix_8.F:_Classification_1) for all grade levels. Table 8.F.1 through table 8.F.3 provide the results of classification accuracy, while table 8.F.4 through table 8.F.6 show classification consistency of the scores.

At each threshold, the classification at adjacent performance levels appeared to be acceptably reliable and consistent. Classification accuracy ranged from 0.84 to 0.97, while classification consistency ranged from 0.81 to 0.95, with most values at or above 0.88. These values are similar to the classification accuracy and consistency estimates reported in the *Summative ELPAC 2020–21 Technical Report* (CDE, 2022).

Table 8.F.7 presents the classification accuracy and consistency results across all proficiency levels for both the composite and overall scores. Classification accuracy ranged from 0.70 to 0.76 for oral language composite scores and from 0.74 to 0.80 for written language composite scores. Classification accuracy for overall scores ranged from 0.79 to 0.82. Reliability estimates for classification consistency ranged from 0.60 to 0.69 for oral language composite scores and from 0.64 to 0.72 for written language composite scores. Classification consistency for overall scores ranged from 0.71 to 0.74. These values are similar to the classification accuracy and consistency estimates reported in the *Summative ELPAC 2021–22 Technical Report* (CDE, 2023).

### Validity Evidence

Validity refers to the degree to which each interpretation or use of a test score is supported by the accumulated evidence (American Educational Research Association [AERA], American Psychological Association [APA], & National Council on Measurement in Education [NCME], 2014; ETS, 2014). Concerns about validity drive the development, administration, and scoring of an assessment. Validity evidence also determines the appropriateness of test score interpretations and uses.

Validation is the process of accumulating evidence to support each proposed score interpretation or use. This validation process does not rely on a single study or gathering only one type of evidence. Rather, validation involves multiple investigations and different kinds of supporting evidence (AERA, APA, & NCME, 2014; Cronbach, 1971; ETS, 2014; Kane, 2006). It begins with the test design and is implicit throughout the entire assessment process, which includes item development and field testing, analyses of items, standard setting, test scaling and linking, scoring, reporting, and score usage.

In this section, the evidence gathered is presented to support the intended uses and interpretations of scores for the Summative ELPAC. This section discusses some of the principles prescribed by AERA, APA, and NCME’s *Standards for Educational and Psychological Testing* (2014). These *Standards* require a clear definition of the purpose of the assessment, a description of the constructs to be assessed, and the population to be assessed, as well as how the scores are to be interpreted and used.

The next subsection defines the purpose of the Summative ELPAC, followed by a description and discussion of different kinds of validity evidence that have been gathered.

#### Content

Evidence based on test content refers to traditional forms of content validity evidence, such as the rating (scoring) of test specifications and test items (Crocker et al., 1989; Sireci, 1998), as well as alignment methods for educational assessments that evaluate the interactions between curriculum frameworks, testing, and instruction (Rothman et al., 2002; Bhola, Impara, & Buckendahl, 2003; Martone & Sireci, 2009).

[Chapter 3](#_Item_Development_and_1) of this report describes the procedures for item development and test assembly for the 2022–23 Summative ELPAC administration and includes a description of the Summative ELPAC blueprint and item review process. [Chapter 4](#_Toc120802066) describes procedures to review test forms to ensure appropriate content coverage and psychometric targets.

As described in subsection [*7.6.3 Demographic Student Group Summaries*](#_Demographic_Student_Group), in anticipation of some students having very little, if any, access to computers or being unfamiliar with navigating the testing interface, ETS and the CDE developed the Technology Readiness Checker for Students (CDE, 2020b). This is an online resource designed to help educators determine a student’s familiarity with navigating a computer-based interface. The purpose of the tool is for educators to better understand what kind of supports a student may need to increase technology familiarity. This type of resource helps to ensure that students are being evaluated on their English proficiency rather than their experience with technology.

##### Description of the State Standards

The 2012 *California English Language Development Standards: Kindergarten Through Grade 12* (2012 ELD Standards) were developed and approved by the California State Board of Education in 2012 and then published in 2014. The 2012 ELD Standards describe the key knowledge, skills, and abilities that students who are learning English need to access, engage with, and achieve in grade‐level academic content. The 2012 ELD Standards provide a framework to guide the development of ELD assessment systems that help California educators ensure that all EL students make progress in the English language knowledge, skills, and abilities needed to become college- and career-ready (CDE, 2014). Items that appear on the Summative ELPAC were all developed to align with the 2012 ELD Standards.

##### Test Blueprints

Test blueprints describe the content of the Summative ELPAC and include four tables with information about the task types in each of the four language domains of Listening, Speaking, Reading, and Writing. Task types are individual items or sets of items that require a student to perform an activity to elicit information about the student’s English language proficiency (ELP).

The test blueprints provide information about the number of items and points that were administered per task type within each grade level and domain. The test blueprints also provide the alignment of task types with the 2012 ELD Standards (CDE, 2019b).

##### Form Assembly Process

The assembly process for the 2022–23 Summative ELPAC form began with the creation of assessment development specifications, which described the content characteristics, the psychometric characteristics, and the number of items to be used in the Summative ELPAC. ETS created the assessment development specifications that the CDE then reviewed and approved. This review process is described in [*Chapter 4: Test Assembly*](#_Toc120802066)*.*

#### Internal Structure

Validity evidence based on *internal structure* refers to the statistical analysis of item and score subdomains to investigate the primary and secondary (if any) dimensions measured by an assessment. Procedures for gathering such evidence include dimensionality and correlational analyses. These analyses were conducted using the 2016–17 field test data. Results of these analyses are summarized in the *ELPAC Summative Dimensionality Report* (CDE, 2019a).

Evidence collected from the 2016–17 field test data supported the oral language and written language composites that are currently used to report Summative ELPAC scores. As part of the evaluation of the transition to computer-based test delivery for the 2019–20 administration, correlations were calculated using data from the fall 2019 field test to examine the relationship between the four content domains and the two composites of the assessment. Additionally, various types of reliability analyses were conducted. The purposes of these analyses were to obtain validity evidence to support the continuation of the reporting scales for the computer-based ELPAC and to support reliable and valid interpretation of test scores. Refer to chapter 7 and appendix 7.A of the *Computer-based Summative English Language Proficiency Assessments for California Fall 2019 Field Test Technical Report* (CDE, 2020a).

##### Correlations Between Domains

Using student raw scores from the 2022–23 test forms, correlation coefficients between the four domain scores were calculated. Table 8.E.1 through table 8.E.7 in [appendix 8.E](#_Appendix_8.E:_Reliability_1) present the correlation coefficients for each grade level and grade span. The results indicate moderate association between the domains. More detailed information is presented in subsection [*8.6.5 Intercorrelations and Reliabilities for Domain Scores*](#_Intercorrelations_and_Reliabilities).

##### Bias and Sensitivity Reviews

To develop test materials that are fair and unbiased to all students, ELPAC test items underwent reviews as part of the item review meetings from February 2–23, 2023, and March 30–April 25, 2023. Thirty-five California educators reviewed the text and artwork of the newly developed items. Items were approved as is, approved with revisions, or rejected. As described in section [*3.7 California Educator Review*](#_California_Educator_Review_3), the educators added value to the item pool by revising items to make them fair and unbiased measures of ELP.

##### Differential Item Functioning

DIF analyses were conducted to identify differences in item performance by student gender and by whether students were of Hispanic or Latino ethnicity. One item was identified as having significant levels of DIF; the item showed Hispanic or Latino versus non-Hispanic or non-Latino DIF. This item favored non-Hispanic students. The content of these items was reviewed by California educators at a DRM, the CDE, and an ETS panel of diverse experts. These reviews concluded that the item content did not have fairness concerns.

##### Reliability

###### Overall Reliability Estimates

The results of reliability analyses on the four domains, two composites, and overall scores are presented in table 8.E.8 in [appendix 8.E](#_Appendix_8.E:_Reliability_1).

The results indicate that the reliability estimates for each domain of the assessment ranged from 0.72 to 0.91 across grade levels. For the oral and written language composite scores, the reliability estimates were high, ranging from 0.85 to 0.92 across grade levels. For the overall scores, the reliability estimates were also high and ranged from 0.92 to 0.94. These reliability estimates are similar to the results of reported in the *Summative ELPAC 2021–22 Technical Report* (CDE, 2023).

###### Student Group Reliability Estimates

The reliabilities are also computed for various demographic student groups. The student groups considered were based on gender, ethnicity, economic status, disability status, military status, foster youth status, homeless status, and migrant status. Reliability estimates for each domain and composite scores are reported for each student group in table 8.E.9 through table 8.E.21 in [appendix 8.E](#_Appendix_8.E:_Reliability_1).

For student groups, the reliability estimates for domains or composites varied from 0.65 to 0.93. The lowest estimate, of 0.65, was for the Listening domain in grade one for the foster youth student group, which had only 271 students. The majority of the estimates were above 0.80. All reliability estimates for the overall score for these student groups were at least 0.88, which indicates that the overall score was highly reliable across the student groups.

###### Reliability of Performance Classifications

The methodology used for estimating the reliability of classification decisions is evaluated with the decision classification analyses in subsection [*8.6.8 Decision Classification Analyses*](#_Decision_Classification_Analyses). The results of these analyses are presented in [appendix 8.F](#_Appendix_8.F:_Classification_1). The lowest classification accuracy coefficient was 0.84 for the oral language composite for the decision between performance levels 2 and 3. The highest classification accuracy classification coefficient was 0.96 for the grade five oral language composite for the decision between performance levels 1 and 2. Three grade levels—one, three, and nine—also had 0.96 classification accuracy coefficients in a written language classification decision. Classification consistency coefficients ranged from 0.81 for the oral language composite for grade one classification between performance levels 2 and 3 to 0.95 for the written language composite classification between performance levels 3 and 4 for grade three.

###### Interrater Reliability

Percent exact agreement statistics provide evidence of the degree to which a student’s score is consistent from one rater to another.

Higher percent exact agreement was observed for Writing than for Speaking. The mean exact agreement results in table 7.2 range from 71 percent to 95 percent across grade levels or grade spans for Writing, and corresponding results in table 7.4 range from 70 percent to 78 percent for Speaking.

Refer to subsection [*7.2.1.4.1 Rater Productivity and Reliability*](#_Rater_Productivity_and_2) for additional information about interrater reliability results.

#### External Relationships

Convergent and discriminant validity evidence can also be established through a pattern of high correlations among scales that purport to measure domains that are known to be closely related and lower correlations among scales that are intended to measure dissimilar domains. The pattern of correlations within the Summative ELPAC provides preliminary evidence of validity by showing that the correlations among oral and written language skills are positive and reasonably high. Table 8.15 provides the correlations between composite scale scores and overall scale scores.

Table 8.15 Correlation Among Composites and the Overall Score

|  |  |  |  |
| --- | --- | --- | --- |
| **Grade Level or Grade Span** | **Language Composite** | **Written Language** | **Overall** |
| Kindergarten | Oral | 0.74 | 0.95 |
| Kindergarten | Written | N/A | 0.91 |
| 1 | Oral | 0.59 | 0.87 |
| 1 | Written | N/A | 0.91 |
| 2 | Oral | 0.62 | 0.88 |
| 2 | Written | N/A | 0.92 |
| 3–5 | Oral | 0.66 | 0.92 |
| 3–5 | Written | N/A | 0.90 |
| 6–8 | Oral | 0.73 | 0.94 |
| 6–8 | Written | N/A | 0.92 |
| 9–10 | Oral | 0.76 | 0.96 |
| 9–10 | Written | N/A | 0.92 |
| 11–12 | Oral | 0.76 | 0.96 |
| 11–12 | Written | N/A | 0.92 |

##### The Relationship Between ELPAC and CAASPP Smarter Balanced English Language Arts/Literacy and Mathematics Test Scores

The relationship between scores from different assessments is frequently examined to support evidence of convergent and divergent validity. If the assessments measure similar constructs, their scores are expected to be closely associated. If the constructs are less similar, scores should have lower correlations.

Historically, many students from grade spans three through five, six through eight, and grade eleven who take the Summative ELPAC also take the California Assessment of Student Performance and Progress (CAASPP) Smarter Balanced Summative Assessments for English language arts/literacy (ELA) and mathematics.

Using data from this subgroup of students, overall ELPAC scale scores were correlated with students’ corresponding overall CAASPP Smarter Balanced scores in 2022–23 to provide evidence of convergent validity.

Table 8.16 provides the total number of students who took the Summative ELPAC, the percentage of those students who took both the CAASPP Smarter Balanced Summative Assessment for ELA and the Summative ELPAC (i.e., who matched), and the percentage who took only the Summative ELPAC (i.e., did not match). It also contains correlations between scores for the matched students.

Table 8.16 Correlation of Overall Summative ELPAC and CAASPP Smarter Balanced for ELA Scores

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Grade Level** | **Number of Students Taking the Summative ELPAC** | **Matched Percentage** | **Not Matched Percentage** | **Number of Students Taking Both** | **Correlation** |
| 3 | 97,908 | 96.13 | 3.87 | 94,118 | 0.70 |
| 4 | 94,239 | 96.19 | 3.81 | 90,650 | 0.69 |
| 5 | 89,376 | 96.18 | 3.82 | 85,960 | 0.67 |
| 6 | 75,878 | 95.94 | 4.06 | 72,794 | 0.67 |
| 7 | 66,271 | 95.08 | 4.92 | 63,012 | 0.64 |
| 8 | 60,498 | 94.79 | 5.21 | 57,345 | 0.62 |
| 11 | 49,460 | 91.95 | 8.05 | 45,480 | 0.60 |

Table 8.17 provides the percentage of students who took the Summative ELPAC, the percentage of those students who took both the CAASPP Smarter Balanced Summative Assessment for Mathematics and the Summative ELPAC (i.e., who matched), and the percentage who took only the Summative ELPAC (i.e., did not match). It also contains correlations between scores for the matched students.

Table 8.17 Correlation of Overall Summative ELPAC and CAASPP Smarter Balanced for Mathematics Scores

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Grade Level** | **Number of Students Taking the Summative ELPAC** | **Matched Percentage** | **Not Matched Percentage** | **Number of Students Taking Both** | **Correlation** |
| 3 | 97,908 | 98.98 | 1.02 | 96,913 | 0.62 |
| 4 | 94,239 | 99.03 | 0.97 | 93,329 | 0.59 |
| 5 | 89,376 | 98.98 | 1.02 | 88,467 | 0.52 |
| 6 | 75,878 | 98.74 | 1.26 | 74,922 | 0.53 |
| 7 | 66,271 | 98.02 | 1.98 | 64,961 | 0.46 |
| 8 | 60,498 | 97.66 | 2.34 | 59,084 | 0.41 |
| 11 | 49,460 | 93.44 | 6.56 | 46,217 | 0.36 |

At least 90 percent of Summative ELPAC students also had Smarter Balanced scores. As expected, correlations between Summative ELPAC and CAASPP Smarter Balanced for Mathematics scores were lower than the correlations between Summative ELPAC and CAASPP Smarter Balanced for ELA scores. Values in table 8.16 and table 8.17 indicated that the difference was more pronounced for higher grade levels. For example, the grade eleven correlation between Summative ELPAC and CAASPP Smarter Balanced for ELA scores was 0.60, while the correlation for Summative ELPAC and Smarter Balanced for Mathematics scores was 0.36.

##### The Relationship Between ELPAC and California Science Test Scores

All students in grades five and eight are expected to take the California Science Test (CAST). Students in high school are also expected to take the CAST once in grade ten, eleven, or twelve after they are enrolled in their last science course.

Overall ELPAC scale scores were correlated with students’ corresponding CAST scores for students who had scores from both assessments in the 2022–23 administration.

Table 8.18 provides the total number of students who took the Summative ELPAC, the percentage of students who took both the CAST and the Summative ELPAC (i.e., who matched), and the percentage who took only the Summative ELPAC (i.e., did not match).

This table also contains correlations between CAST and Summative ELPAC scores for students who took both assessments—grade five, grade eight, and grades ten through twelve—are shown in table 8.18 because these are the grade levels at which both the CAST and the ELPAC are administered.

Table 8.18 Correlation of Overall Summative ELPAC and CAST Scores

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Grade Level** | **Number of Students Taking the Summative ELPAC** | **Matched Percentage** | **Not Matched Percentage** | **Number of Students Taking Both** | **Correlation** |
| 5 | 89,376 | 98.98 | 1.02 | 88,460 | 0.64 |
| 8 | 60,498 | 97.85 | 2.15 | 59,195 | 0.50 |
| 10 | 57,330 | 5.05 | 94.95 | 2,897 | 0.47 |
| 11 | 49,460 | 65.76 | 34.24 | 32,523 | 0.49 |
| 12 | 39,652 | 35.48 | 64.52 | 14,069 | 0.49 |

The pattern of correlations across assessments is reasonable. The highest correlations are for the English language assessments: the Summative ELPAC and Smarter Balanced for ELA. The lowest correlations are for the least similar content: the Summative ELPAC and Smarter Balanced for Mathematics. Because a science assessment necessarily involves more English language than a mathematics assessment, and less than an English language assessment, it is reasonable that correlations with the CAST are intermediate.

The correlations between Summative ELPAC scores and either Smarter Balanced for ELA or mathematics scores tended to decline at higher grade levels. This is difficult to interpret. Lower reliability can lead to lower correlation, but reliabilities did not decline for the Summative ELPAC with higher grade levels. Reliabilities also did not decline for Smarter Balanced for ELA, according to the most recent publicly available evidence (Smarter Balanced, 2022), but did decline for Smarter Balanced for Mathematics.

#### Consequences of Testing

Evidence based on *consequences of testing* refers to the evaluation of the intended and unintended consequences associated with a testing program. Examples of evidence based on testing consequences include investigations of adverse impact, evaluation of the effects of testing on instruction, and evaluation of the effects of testing on issues such as high school dropout rates. With respect to educational assessments, the *Standards for Educational and Psychological Testing* (AERA, APA, & NCME, 2014) stress the importance of evaluating test consequences:

When educational testing programs are mandated…the ways in which test results are intended to be used should be clearly described by those who mandate the tests. It is also the responsibility of those who mandate the use of tests to monitor their impact and to identify and minimize potential negative consequences as feasible. Consequences resulting from the uses of the test, both intended and unintended, should also be examined by the test developer and/or user. (AERA et al., 2014, p. 195)

Investigations of testing consequences relevant to the Summative ELPAC goals may include analyses of students’ opportunity to become proficient English language learners and thus RFEP, as well as potential analyses to inform instruction. Ongoing collection of evidence of the validity of these test score interpretations is of critical importance, as these scores are one set of criteria used to determine whether individual students qualify for RFEP status. Results from the Summative ELPAC may also be used for instructional planning.

Unintended consequences, such as changes in instruction, diminished morale among teachers and students, increased pressure on students that lead to increased dropout rates, or the pursuit of college majors and careers that are less challenging can be evaluated. These sorts of investigations require information beyond what is currently available to the Summative ELPAC program.

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### Accessibility Information

#### Alternative Text for Equation 8.1

p value sub dich equals the fraction with the numerator the sum from j equals 1 to J sub i of X sub ij and the denominator J sub i end fraction. *(Return to* [*equation 8.1*](#EQ8_1)*.)*

#### Alternative Text for Equation 8.2

p value sub poly equals the fraction with the numerator the sum from j equals 1 to J sub i of X sub ij and the denominator J sub i times M sub i end fraction. *(Return to* [*equation 8.2*](#EQ8_2)*.)*

#### Alternative Text for Equation 8.3

r sub polyreg equals the fraction beta-hat times s sub tot divided by the square root of beta-hat squared times s squared sub tot plus 1. *(Return to* [*equation 8.3*](#EQ8_3)*.)*

#### Alternative Text for Equation 8.4

alpha sub MH equals the numerator open parenthesis the sum from m equals 1 to M of R sub rm times W sub fm divided by N sub tm close parenthesis divided by the denominator open parenthesis the sum from m equals 1 to M of R sub fm times W sub rm divided by N sub tm closed parenthesis. *(Return to* [*equation 8.4*](#EQ8_4)*.)*

#### Alternative Text for Equation 8.5

MH D-DIF equals negative 2.35 times the natural logarithm open bracket alpha sub MH close bracket. *(Return to* [*equation 8.5*](#EQ8_5)*.)*

#### Alternative Text for Equation 8.6

SMD equals the fraction with numerator the sum from m equals 1 to M of N sub fm times E sub fm and denominator the sum from m equals 1 to M of N sub fm end fraction minus the fraction with numerator the sum from m equals 1 to M of N sub fm times E sub rm and denominator the sum from m equals 1 to M of N sub fm end fraction equals the fraction with the numerator the sum from m equals 1 to M of D sub fm and the denominator m equals1 to M of N sub fm end fraction. *(Return to* [*equation 8.6*](#EQ8_6)*.)*

#### Alternative Text for Equation 8.7

p sub ih of theta-hat sub j equals the numerator exp open parenthesis the sum from v equals 1 to h of D times a sub i open parenthesis theta-hat sub j minus b sub i plus d sub iv close parenthesis close parenthesis divided by the denominator open parenthesis 1 plus the sum from c equals 1 to m sub i exp open parenthesis the sum from v equals 1 to c of D times a sub i open parenthesis theta-hat sub j minus b sub i plus d sub iv close parenthesis close parenthesis close parenthesis, if score h equals 1, 2, …, n sub i.

p sub ih of theta-hat sub j equals 1 divided by the denominator open parenthesis 1 plus the sum from c equals 1 to m sub i exp open parenthesis the sum from v equals 1 to c of D times a sub i open parenthesis theta-hat sub j minus b sub i plus d sub iv close parenthesis close parenthesis close parenthesis, if score h equals 0. *(Return to* [*equation 8.7*](#EQ8_7)*.)*

#### Alternative Text for Equation 8.8

d squared sub i equals the sum across k quadrature points the squared difference in the expected item score for item i based on the new parameters and bank parameters multiplied by weights. *(Return to* [*equation 8.8*](#EQ8_8)*.)*

#### Alternative Text for Equation 8.9

epsilon of theta equals the sum from i equals 1 to n sub dich of P sub i of theta plus the sum from j equals 1 to n sub poly over each sum of x equals 1 to m of s sub xj times P sub xj of theta. *(Return to* [*equation 8.9*](#EQ8_9)*.)*

#### Alternative Text for Equation 8.10

alpha-hat equals the numerator I divided by the denominator I minus 1 multiplied by open bracket 1 minus the fraction with the numerator sum from i equals 1 to I multiplied by s squared sub i divided by the denominator s squared close bracket. *(Return to* [*equation 8.10*](#EQ8_10)*.)*

#### Alternative Text for Equation 8.11

alpha-hat sub overall equals 1 minus fraction with numerator sum from c equals 1 to C of w squared sub c times s squared sub c times open parenthesis 1 minus alpha-hat sub c close parenthesis and denominator s squared sub overall. *(Return to* [*equation 8.11*](#EQ8_11)*.)*

#### Alternative Text for Equation 8.12

SEM sub oral equals s sub oral multiplied by the square root of open bracket 1 minus alpha-hat sub oral closing bracket. *(Return to* [*equation 8.12*](#EQ8_12)*.)*

#### Alternative Text for Equation 8.13

SEM sub written equals s sub written multiplied by the square root of open bracket 1 minus alpha-hat sub written closing bracket. *(Return to* [*equation 8.13*](#EQ8_13)*.)*

#### Alternative Text for Equation 8.14

Overall SEM is equal to square root of the sum of the weighted composite of the squared SEMs. The weighted composite is 0.5 squared times the square of the oral language SEM plus 0.5 squared times the square of the written language SEM. *(Return to* [*equation 8.14*](#EQ8_14)*.)*

#### Alternative Text for Equation 8.15

Overall SEM is equal to square root of the sum of the weighted composite of the squared SEMs. The weighted composite is 0.7 squared times the square of the oral language SEM plus 0.3 squared times the square of the written language SEM. *(Return to* [*equation 8.15*](#EQ8_15)*.)*

#### Alternative Text for Equation 8.16

CSEM of theta-hat sub j equals 1 divided by the square root of I of theta sub j. *(Return to* [*equation 8.16*](#EQ8_16)*.)*

#### Alternative Text for Equation 8.17

I of theta-hat sub j equals the sum from i equals 1 to I of I sub i of theta-hat sub j. *(Return to* [*equation 8.17*](#EQ8_17)*.)*

#### Alternative Text for Equation 8.18

I sub i of theta-hat sub j equals open bracket s sub i2 of theta-hat sub j minus s sub i squared of theta-hat sub j. *(Return to* [*equation 8.18*](#EQ8_18)*.)*

#### Alternative Text for Equation 8.19

s sub i of theta-hat sub j equals the sum from h equals 0 to M sub i of h times p sub ih of theta-hat sub j. *(Return to* [*equation 8.19*](#EQ8_19)*.)*

#### Alternative Text for Equation 8.20

s sub i2 of theta-hat sub j equals the sum from h equals 0 to M sub I of h squared times p sub ih of theta-hat sub j. *(Return to* [*equation 8.20*](#EQ8_20)*.)*

#### Alternative Text for Equation 8.21

CSEM of SS sub j equals A times CSEM of theta-hat sub j. *(Return to* [*equation 8.21*](#EQ8_21)*.)*

### Appendix 8.A: Classical Item Analyses Results

In table 8.A.1 through table 8.A.8,

* LS = Listening,
* RD = Reading,
* SP = Speaking,
* WT = Writing,
* D = dichotomous item, and
* P = polytomous item.

Table 8.A.1 Summary of Overall Classical Item Statistics

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Grade Level or Grade Span** | **Domain** | **Item Type** | **No. of Items** | **Number of Students** | **Mean *p*-value** | **Mean Item-Total Correlation** | **Minimum *p*-value** | **Minimum Item-Total Correlation** | **Maximum *p*-value** | **Maximum Item-Total Correlation** |
| Kindergarten | LS | D | 20 | 51,316 | 0.63 | 0.61 | 0.30 | 0.46 | 0.89 | 0.77 |
| 1 | LS | D | 22 | 37,990 | 0.73 | 0.53 | 0.35 | 0.27 | 0.98 | 0.69 |
| 2 | LS | D | 22 | 39,573 | 0.71 | 0.54 | 0.47 | 0.37 | 0.95 | 0.71 |
| 3–5 | LS | D | 22 | 145,210 | 0.75 | 0.53 | 0.41 | 0.35 | 0.93 | 0.65 |
| 6–8 | LS | D | 22 | 111,674 | 0.75 | 0.55 | 0.49 | 0.27 | 0.96 | 0.67 |
| 9–10 | LS | D | 22 | 67,709 | 0.67 | 0.55 | 0.39 | 0.34 | 0.90 | 0.70 |
| 11–12 | LS | D | 22 | 52,813 | 0.67 | 0.56 | 0.48 | 0.37 | 0.91 | 0.70 |
| Kindergarten | SP | P | 9 | 58,010 | 0.71 | 0.85 | 0.43 | 0.77 | 0.86 | 0.93 |
| 1 | SP | P | 9 | 39,798 | 0.77 | 0.79 | 0.41 | 0.70 | 0.91 | 0.88 |
| 2 | SP | P | 12 | 40,523 | 0.82 | 0.72 | 0.56 | 0.62 | 0.96 | 0.85 |
| 3–5 | SP | P | 12 | 145,210 | 0.82 | 0.73 | 0.68 | 0.63 | 0.94 | 0.84 |
| 6–8 | SP | P | 12 | 111,674 | 0.84 | 0.76 | 0.66 | 0.58 | 0.95 | 0.86 |
| 9–10 | SP | P | 12 | 67,709 | 0.84 | 0.79 | 0.71 | 0.69 | 0.91 | 0.88 |
| 11–12 | SP | P | 12 | 52,813 | 0.83 | 0.79 | 0.67 | 0.74 | 0.94 | 0.90 |
| Kindergarten | RD | D | 11 | 25,647 | 0.74 | 0.64 | 0.61 | 0.54 | 0.87 | 0.73 |
| Kindergarten | RD | P | 3 | 25,647 | 0.67 | 0.76 | 0.64 | 0.73 | 0.71 | 0.79 |
| 1 | RD | D | 21 | 12,965 | 0.64 | 0.69 | 0.42 | 0.62 | 0.86 | 0.77 |
| 2 | RD | D | 26 | 17,468 | 0.69 | 0.65 | 0.40 | 0.35 | 0.88 | 0.81 |
| 3–5 | RD | D | 26 | 64,761 | 0.48 | 0.55 | 0.24 | 0.21 | 0.89 | 0.79 |
| 6–8 | RD | D | 26 | 44,700 | 0.56 | 0.54 | 0.26 | 0.38 | 0.80 | 0.71 |
| 9–10 | RD | D | 26 | 23,390 | 0.54 | 0.52 | 0.33 | 0.33 | 0.75 | 0.71 |
| 11–12 | RD | D | 26 | 25,731 | 0.52 | 0.52 | 0.27 | 0.16 | 0.83 | 0.78 |
| Kindergarten | WT | P | 8 | 47,499 | 0.65 | 0.85 | 0.55 | 0.75 | 0.83 | 0.92 |
| 1 | WT | P | 7 | 29,937 | 0.59 | 0.84 | 0.44 | 0.72 | 0.93 | 0.91 |
| 2 | WT | P | 6 | 30,704 | 0.60 | 0.86 | 0.54 | 0.81 | 0.67 | 0.91 |
| 3–5 | WT | P | 6 | 246,850 | 0.61 | 0.82 | 0.50 | 0.76 | 0.72 | 0.89 |
| 6–8 | WT | P | 6 | 171,635 | 0.68 | 0.79 | 0.56 | 0.69 | 0.80 | 0.89 |
| 9–10 | WT | P | 6 | 96,478 | 0.66 | 0.80 | 0.58 | 0.71 | 0.75 | 0.90 |
| 11–12 | WT | P | 6 | 72,261 | 0.70 | 0.81 | 0.57 | 0.71 | 0.82 | 0.88 |

Table 8.A.2 Summary of the Classical Item Statistics by Task Type—Kindergarten

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Domain** | **Task Type** | **Item Type** | **No. of Items** | **Number of Students** | **Mean *p*-value** | **Mean Item-Total Correlation** | **Minimum *p*-value** | **Minimum Item-Total Correlation** | **Maximum *p*-value** | **Maximum Item-Total Correlation** |
| Listening | *Listen to a Short Exchange* | D | 5 | 51,316 | 0.71 | 0.58 | 0.62 | 0.46 | 0.80 | 0.73 |
| Listening | *Listen to a Story* | D | 9 | 51,316 | 0.63 | 0.63 | 0.45 | 0.50 | 0.86 | 0.77 |
| Listening | *Listen to an Oral Presentation* | D | 6 | 51,316 | 0.55 | 0.60 | 0.30 | 0.53 | 0.89 | 0.70 |
| Speaking | *Retell A Narrative* | P | 2 | 53,740 | 0.52 | 0.92 | 0.51 | 0.90 | 0.54 | 0.93 |
| Speaking | *Speaking—Support an Opinion* | P | 2 | 58,010 | 0.84 | 0.80 | 0.81 | 0.77 | 0.86 | 0.83 |
| Speaking | *Summarize an Academic Presentation* | P | 1 | 53,694 | 0.43 | 0.92 | 0.43 | 0.92 | 0.43 | 0.92 |
| Speaking | *Talk about a Scene* | P | 4 | 58,010 | 0.81 | 0.82 | 0.77 | 0.79 | 0.86 | 0.84 |
| Reading | *Read-Along Information* | D | 6 | 25,644 | 0.73 | 0.64 | 0.61 | 0.54 | 0.82 | 0.73 |
| Reading | *Read-Along Story with Scaffolding* | D | 3 | 25,647 | 0.73 | 0.65 | 0.69 | 0.59 | 0.77 | 0.70 |
| Reading | *Read-Along Story with Scaffolding* | P | 1 | 25,647 | 0.71 | 0.73 | 0.71 | 0.73 | 0.71 | 0.73 |
| Reading | *Read-Along Word with Scaffolding* | D | 2 | 25,647 | 0.78 | 0.63 | 0.68 | 0.62 | 0.87 | 0.65 |
| Reading | *Read-Along Word with Scaffolding* | P | 2 | 25,647 | 0.66 | 0.77 | 0.64 | 0.76 | 0.67 | 0.79 |
| Writing | *Label a Picture—Word with Scaffolding* | P | 4 | 47,499 | 0.69 | 0.82 | 0.57 | 0.75 | 0.83 | 0.90 |
| Writing | *Write a Story Together with Scaffolding* | P | 4 | 47,499 | 0.61 | 0.88 | 0.55 | 0.83 | 0.69 | 0.92 |

Table 8.A.3 Summary of the Classical Item Statistics by Task Type—Grade One

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Domain** | **Task Type** | **Item Type** | **No. of Items** | **Number of Students** | **Mean *p*-value** | **Mean Item-Total Correlation** | **Minimum *p*-value** | **Minimum Item-Total Correlation** | **Maximum *p*-value** | **Maximum Item-Total Correlation** |
| Listening | *Listen to a Classroom Conversation* | D | 2 | 37,990 | 0.71 | 0.47 | 0.63 | 0.44 | 0.79 | 0.50 |
| Listening | *Listen to a Short Exchange* | D | 2 | 37,990 | 0.74 | 0.35 | 0.73 | 0.27 | 0.76 | 0.42 |
| Listening | *Listen to a Story* | D | 9 | 37,990 | 0.82 | 0.57 | 0.54 | 0.45 | 0.98 | 0.69 |
| Listening | *Listen to an Oral Presentation* | D | 9 | 37,989 | 0.64 | 0.54 | 0.35 | 0.41 | 0.96 | 0.60 |
| Speaking | *Retell A Narrative* | P | 1 | 38,052 | 0.69 | 0.88 | 0.69 | 0.88 | 0.69 | 0.88 |
| Speaking | *Speaking—Support an Opinion* | P | 2 | 39,798 | 0.88 | 0.74 | 0.87 | 0.70 | 0.90 | 0.78 |
| Speaking | *Summarize an Academic Presentation* | P | 2 | 38,039 | 0.47 | 0.87 | 0.41 | 0.86 | 0.53 | 0.88 |
| Speaking | *Talk about a Scene* | P | 4 | 39,798 | 0.87 | 0.76 | 0.83 | 0.71 | 0.91 | 0.80 |
| Reading | *Read a Literary Passage* | D | 3 | 12,965 | 0.59 | 0.75 | 0.53 | 0.74 | 0.66 | 0.77 |
| Reading | *Read a Short Informational Passage* | D | 6 | 12,965 | 0.66 | 0.69 | 0.53 | 0.62 | 0.81 | 0.73 |
| Reading | *Read an Informational Passage* | D | 6 | 12,964 | 0.49 | 0.69 | 0.42 | 0.65 | 0.61 | 0.74 |
| Reading | *Read and Choose a Sentence* | D | 4 | 12,965 | 0.79 | 0.67 | 0.72 | 0.64 | 0.85 | 0.70 |
| Reading | *Read and Choose a Word* | D | 2 | 12,965 | 0.85 | 0.66 | 0.84 | 0.65 | 0.86 | 0.66 |
| Writing | *Describe a Picture* | P | 1 | 29,937 | 0.46 | 0.91 | 0.46 | 0.91 | 0.46 | 0.91 |
| Writing | *Write About an Experience* | P | 1 | 29,937 | 0.44 | 0.89 | 0.44 | 0.89 | 0.44 | 0.89 |
| Writing | *Write a Story Together with Scaffolding* | P | 3 | 29,937 | 0.72 | 0.78 | 0.49 | 0.72 | 0.93 | 0.84 |
| Writing | *Write an Informational Text Together* | P | 2 | 29,937 | 0.52 | 0.86 | 0.52 | 0.86 | 0.52 | 0.87 |

Table 8.A.4 Summary of the Classical Item Statistics by Task Type—Grade Two

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Domain** | **Task Type** | **Item Type** | **No. of Items** | **Number of Students** | **Mean *p*-value** | **Mean Item-Total Correlation** | **Minimum *p*-value** | **Minimum Item-Total Correlation** | **Maximum *p*-value** | **Maximum Item-Total Correlation** |
| Listening | *Listen to a Classroom Conversation* | D | 2 | 39,573 | 0.68 | 0.49 | 0.56 | 0.45 | 0.79 | 0.52 |
| Listening | *Listen to a Short Exchange* | D | 2 | 39,573 | 0.88 | 0.49 | 0.82 | 0.48 | 0.95 | 0.50 |
| Listening | *Listen to a Story* | D | 9 | 39,573 | 0.80 | 0.60 | 0.48 | 0.53 | 0.94 | 0.71 |
| Listening | *Listen to an Oral Presentation* | D | 9 | 39,573 | 0.59 | 0.49 | 0.47 | 0.37 | 0.70 | 0.58 |
| Speaking | *Retell A Narrative* | P | 1 | 39,264 | 0.79 | 0.82 | 0.79 | 0.82 | 0.79 | 0.82 |
| Speaking | *Speaking—Support an Opinion* | P | 2 | 39,272 | 0.92 | 0.67 | 0.89 | 0.67 | 0.95 | 0.67 |
| Speaking | *Speech Functions* | P | 3 | 40,523 | 0.80 | 0.67 | 0.77 | 0.64 | 0.85 | 0.69 |
| Speaking | *Summarize an Academic Presentation* | P | 2 | 39,263 | 0.56 | 0.85 | 0.56 | 0.85 | 0.57 | 0.85 |
| Speaking | *Talk about a Scene* | P | 4 | 40,523 | 0.93 | 0.70 | 0.91 | 0.62 | 0.96 | 0.77 |
| Reading | *Read a Literary Passage* | D | 8 | 17,468 | 0.72 | 0.73 | 0.58 | 0.57 | 0.83 | 0.81 |
| Reading | *Read a Short Informational Passage* | D | 6 | 17,468 | 0.70 | 0.59 | 0.57 | 0.49 | 0.88 | 0.72 |
| Reading | *Read an Informational Passage* | D | 8 | 17,467 | 0.58 | 0.59 | 0.40 | 0.35 | 0.70 | 0.76 |
| Reading | *Read and Choose a Sentence* | D | 4 | 17,468 | 0.85 | 0.69 | 0.80 | 0.60 | 0.88 | 0.73 |
| Writing | *Describe a Picture* | P | 1 | 30,704 | 0.67 | 0.91 | 0.67 | 0.91 | 0.67 | 0.91 |
| Writing | *Write About an Experience* | P | 1 | 30,704 | 0.54 | 0.90 | 0.54 | 0.90 | 0.54 | 0.90 |
| Writing | *Write a Story Together with Scaffolding* | P | 2 | 30,704 | 0.62 | 0.82 | 0.60 | 0.81 | 0.63 | 0.83 |
| Writing | *Write an Informational Text Together* | P | 2 | 30,704 | 0.59 | 0.87 | 0.59 | 0.87 | 0.60 | 0.87 |

Table 8.A.5 Summary of the Classical Item Statistics by Task Type—Grade Span Three Through Five

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Domain** | **Task Type** | **Item Type** | **No. of Items** | **Number of Students** | **Mean *p*-value** | **Mean Item-Total Correlation** | **Minimum *p*-value** | **Minimum Item-Total Correlation** | **Maximum *p*-value** | **Maximum Item-Total Correlation** |
| Listening | *Listen to a Classroom Conversation* | D | 3 | 145,210 | 0.90 | 0.55 | 0.89 | 0.50 | 0.91 | 0.61 |
| Listening | *Listen to a Short Exchange* | D | 3 | 145,210 | 0.89 | 0.58 | 0.86 | 0.54 | 0.93 | 0.64 |
| Listening | *Listen to a Story* | D | 6 | 145,210 | 0.78 | 0.55 | 0.60 | 0.45 | 0.91 | 0.65 |
| Listening | *Listen to an Oral Presentation* | D | 10 | 145,209 | 0.64 | 0.49 | 0.41 | 0.35 | 0.83 | 0.57 |
| Speaking | *Retell A Narrative* | P | 1 | 139,752 | 0.80 | 0.79 | 0.80 | 0.79 | 0.80 | 0.79 |
| Speaking | *Speaking—Support an Opinion* | P | 2 | 139,767 | 0.83 | 0.75 | 0.82 | 0.74 | 0.84 | 0.77 |
| Speaking | *Speech Functions* | P | 3 | 145,210 | 0.82 | 0.70 | 0.78 | 0.63 | 0.87 | 0.78 |
| Speaking | *Summarize an Academic Presentation* | P | 2 | 139,752 | 0.69 | 0.83 | 0.68 | 0.82 | 0.69 | 0.84 |
| Speaking | *Talk about a Scene* | P | 4 | 145,210 | 0.89 | 0.69 | 0.78 | 0.65 | 0.94 | 0.74 |
| Reading | *Read a Literary Passage* | D | 6 | 64,761 | 0.59 | 0.70 | 0.45 | 0.51 | 0.74 | 0.79 |
| Reading | *Read a Short Informational Passage* | D | 6 | 64,761 | 0.50 | 0.62 | 0.38 | 0.55 | 0.62 | 0.67 |
| Reading | *Read a Student Essay* | D | 6 | 64,761 | 0.35 | 0.43 | 0.27 | 0.33 | 0.50 | 0.56 |
| Reading | *Read an Informational Passage* | D | 6 | 64,760 | 0.36 | 0.40 | 0.24 | 0.21 | 0.47 | 0.56 |
| Reading | *Read and Choose a Sentence* | D | 2 | 64,761 | 0.87 | 0.73 | 0.84 | 0.70 | 0.89 | 0.76 |
| Writing | *Describe a Picture* | P | 2 | 246,850 | 0.71 | 0.77 | 0.69 | 0.77 | 0.72 | 0.77 |
| Writing | *Write About Academic Information* | P | 2 | 246,677 | 0.60 | 0.80 | 0.60 | 0.76 | 0.60 | 0.84 |
| Writing | *Write About an Experience* | P | 1 | 246,827 | 0.54 | 0.89 | 0.54 | 0.89 | 0.54 | 0.89 |
| Writing | *Writing—Justify an Opinion* | P | 1 | 246,370 | 0.50 | 0.89 | 0.50 | 0.89 | 0.50 | 0.89 |

Table 8.A.6 Summary of the Classical Item Statistics by Task Type—Grade Span Six Through Eight

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Domain** | **Task Type** | **Item Type** | **No. of Items** | **Number of Students** | **Mean *p*-value** | **Mean Item-Total Correlation** | **Minimum *p*-value** | **Minimum Item-Total Correlation** | **Maximum *p*-value** | **Maximum Item-Total Correlation** |
| Listening | *Listen to a Classroom Conversation* | D | 3 | 111,674 | 0.89 | 0.53 | 0.86 | 0.46 | 0.92 | 0.56 |
| Listening | *Listen to a Short Exchange* | D | 3 | 111,674 | 0.87 | 0.60 | 0.77 | 0.56 | 0.96 | 0.63 |
| Listening | *Listen to a Speaker Support an Opinion* | D | 8 | 111,673 | 0.71 | 0.58 | 0.50 | 0.50 | 0.81 | 0.67 |
| Listening | *Listen to an Oral Presentation* | D | 8 | 111,674 | 0.68 | 0.51 | 0.49 | 0.27 | 0.85 | 0.59 |
| Speaking | *Present and Discuss Information* | P | 2 | 107,999 | 0.71 | 0.81 | 0.68 | 0.80 | 0.74 | 0.83 |
| Speaking | *Speaking—Support an Opinion* | P | 2 | 108,057 | 0.82 | 0.81 | 0.81 | 0.81 | 0.83 | 0.82 |
| Speaking | *Speech Functions* | P | 2 | 111,674 | 0.90 | 0.70 | 0.90 | 0.66 | 0.90 | 0.74 |
| Speaking | *Summarize an Academic Presentation* | P | 2 | 107,991 | 0.71 | 0.86 | 0.66 | 0.86 | 0.76 | 0.86 |
| Speaking | *Talk about a Scene* | P | 4 | 111,674 | 0.94 | 0.68 | 0.94 | 0.58 | 0.95 | 0.72 |
| Reading | *Read a Literary Passage* | D | 6 | 44,700 | 0.61 | 0.57 | 0.58 | 0.47 | 0.63 | 0.67 |
| Reading | *Read a Short Informational Passage* | D | 6 | 44,700 | 0.60 | 0.50 | 0.26 | 0.42 | 0.80 | 0.57 |
| Reading | *Read a Student Essay* | D | 8 | 44,700 | 0.59 | 0.57 | 0.46 | 0.38 | 0.75 | 0.71 |
| Reading | *Read an Informational Passage* | D | 6 | 44,700 | 0.42 | 0.48 | 0.34 | 0.38 | 0.52 | 0.58 |
| Writing | *Describe a Picture* | P | 2 | 171,635 | 0.75 | 0.71 | 0.70 | 0.69 | 0.80 | 0.73 |
| Writing | *Write About Academic Information* | P | 2 | 171,449 | 0.70 | 0.78 | 0.66 | 0.74 | 0.74 | 0.83 |
| Writing | *Write About an Experience* | P | 1 | 171,614 | 0.63 | 0.87 | 0.63 | 0.87 | 0.63 | 0.87 |
| Writing | *Writing—Justify an Opinion* | P | 1 | 171,058 | 0.56 | 0.89 | 0.56 | 0.89 | 0.56 | 0.89 |

Table 8.A.7 Summary of the Classical Item Statistics by Task Type—Grade Span Nine and Ten

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Domain** | **Task Type** | **Item Type** | **No. of Items** | **Number of Students** | **Mean *p*-value** | **Mean Item-Total Correlation** | **Minimum *p*-value** | **Minimum Item-Total Correlation** | **Maximum *p*-value** | **Maximum Item-Total Correlation** |
| Listening | *Listen to a Classroom Conversation* | D | 3 | 67,709 | 0.70 | 0.59 | 0.67 | 0.55 | 0.74 | 0.66 |
| Listening | *Listen to a Short Exchange* | D | 3 | 67,709 | 0.82 | 0.57 | 0.75 | 0.49 | 0.87 | 0.62 |
| Listening | *Listen to a Speaker Support an Opinion* | D | 8 | 67,708 | 0.70 | 0.57 | 0.39 | 0.34 | 0.90 | 0.70 |
| Listening | *Listen to an Oral Presentation* | D | 8 | 67,709 | 0.58 | 0.53 | 0.40 | 0.42 | 0.77 | 0.68 |
| Speaking | *Present and Discuss Information* | P | 2 | 62,904 | 0.83 | 0.76 | 0.83 | 0.75 | 0.84 | 0.76 |
| Speaking | *Speaking—Support an Opinion* | P | 2 | 62,959 | 0.85 | 0.82 | 0.84 | 0.81 | 0.86 | 0.82 |
| Speaking | *Speech Functions* | P | 2 | 67,709 | 0.87 | 0.76 | 0.85 | 0.69 | 0.89 | 0.83 |
| Speaking | *Summarize an Academic Presentation* | P | 2 | 62,898 | 0.71 | 0.88 | 0.71 | 0.87 | 0.71 | 0.88 |
| Speaking | *Talk about a Scene* | P | 4 | 67,709 | 0.88 | 0.77 | 0.86 | 0.70 | 0.91 | 0.83 |
| Reading | *Read a Literary Passage* | D | 6 | 23,390 | 0.62 | 0.59 | 0.49 | 0.43 | 0.75 | 0.71 |
| Reading | *Read a Short Informational Passage* | D | 6 | 23,390 | 0.57 | 0.52 | 0.39 | 0.37 | 0.71 | 0.64 |
| Reading | *Read a Student Essay* | D | 8 | 23,390 | 0.48 | 0.47 | 0.33 | 0.33 | 0.65 | 0.61 |
| Reading | *Read an Informational Passage* | D | 6 | 23,390 | 0.51 | 0.51 | 0.41 | 0.40 | 0.60 | 0.67 |
| Writing | *Describe a Picture* | P | 2 | 96,478 | 0.72 | 0.72 | 0.69 | 0.71 | 0.75 | 0.74 |
| Writing | *Write About Academic Information* | P | 2 | 96,347 | 0.64 | 0.80 | 0.63 | 0.74 | 0.65 | 0.86 |
| Writing | *Write About an Experience* | P | 1 | 96,458 | 0.65 | 0.88 | 0.65 | 0.88 | 0.65 | 0.88 |
| Writing | *Writing—Justify an Opinion* | P | 1 | 96,167 | 0.58 | 0.90 | 0.58 | 0.90 | 0.58 | 0.90 |

Table 8.A.8 Summary of the Classical Item Statistics by Task Type—Grade Span Eleven and Twelve

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Domain** | **Task Type** | **Item Type** | **No. of Items** | **Number of Students** | **Mean *p*-value** | **Mean Item-Total Correlation** | **Minimum *p*-value** | **Minimum Item-Total Correlation** | **Maximum *p*-value** | **Maximum Item-Total Correlation** |
| Listening | *Listen to a Classroom Conversation* | D | 3 | 52,813 | 0.84 | 0.65 | 0.72 | 0.60 | 0.91 | 0.69 |
| Listening | *Listen to a Short Exchange* | D | 3 | 52,813 | 0.67 | 0.60 | 0.60 | 0.49 | 0.73 | 0.67 |
| Listening | *Listen to a Speaker Support an Opinion* | D | 8 | 52,813 | 0.68 | 0.57 | 0.48 | 0.37 | 0.77 | 0.70 |
| Listening | *Listen to an Oral Presentation* | D | 8 | 52,813 | 0.59 | 0.51 | 0.50 | 0.38 | 0.72 | 0.61 |
| Speaking | *Present and Discuss Information* | P | 2 | 50,085 | 0.86 | 0.76 | 0.85 | 0.76 | 0.86 | 0.77 |
| Speaking | *Speaking—Support an Opinion* | P | 2 | 50,125 | 0.82 | 0.84 | 0.82 | 0.83 | 0.82 | 0.84 |
| Speaking | *Speech Functions* | P | 2 | 52,813 | 0.79 | 0.75 | 0.76 | 0.74 | 0.82 | 0.76 |
| Speaking | *Summarize an Academic Presentation* | P | 2 | 50,082 | 0.71 | 0.87 | 0.67 | 0.84 | 0.75 | 0.90 |
| Speaking | *Talk about a Scene* | P | 4 | 52,813 | 0.92 | 0.77 | 0.88 | 0.75 | 0.94 | 0.79 |
| Reading | *Read a Literary Passage* | D | 6 | 25,731 | 0.48 | 0.54 | 0.27 | 0.34 | 0.65 | 0.66 |
| Reading | *Read a Short Informational Passage* | D | 6 | 25,731 | 0.66 | 0.62 | 0.43 | 0.41 | 0.83 | 0.78 |
| Reading | *Read a Student Essay* | D | 8 | 25,731 | 0.52 | 0.45 | 0.32 | 0.16 | 0.68 | 0.59 |
| Reading | *Read an Informational Passage* | D | 6 | 25,731 | 0.42 | 0.48 | 0.30 | 0.23 | 0.61 | 0.61 |
| Writing | *Describe a Picture* | P | 2 | 72,261 | 0.74 | 0.73 | 0.71 | 0.71 | 0.76 | 0.76 |
| Writing | *Write About Academic Information* | P | 2 | 72,183 | 0.76 | 0.82 | 0.69 | 0.79 | 0.82 | 0.85 |
| Writing | *Write About an Experience* | P | 1 | 72,252 | 0.65 | 0.88 | 0.65 | 0.88 | 0.65 | 0.88 |
| Writing | *Writing—Justify an Opinion* | P | 1 | 72,079 | 0.57 | 0.86 | 0.57 | 0.86 | 0.57 | 0.86 |

In table 8.A.9 through table 8.A.22,

* OP = operational item, and
* FT = field test item.

Table 8.A.9 Dichotomous Item Statistics for Listening and Reading—Kindergarten

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Domain** | **OP/FT** | **Item ID** | **Task Type** | **p-value** | **Item-Total Correlation** | **Percent Omit Rate** |
| Listening | OP | VR012659 | *Listen to a Short Exchange* | 0.67 | 0.46 | 1.90 |
| Listening | OP | VR012699 | *Listen to a Short Exchange* | 0.80 | 0.58 | 1.11 |
| Listening | OP | VR021577 | *Listen to a Short Exchange* | 0.72 | 0.65 | 2.60 |
| Listening | FT | VR025362 | *Listen to a Story* | 0.88 | 0.58 | 0.91 |
| Listening | FT | VR025363 | *Listen to a Story* | 0.83 | 0.51 | 0.41 |
| Listening | FT | VR025364 | *Listen to a Story* | 0.67 | 0.67 | 1.28 |
| Listening | OP | VR025402 | *Listen to a Story* | 0.76 | 0.77 | 1.70 |
| Listening | OP | VR025403 | *Listen to a Story* | 0.79 | 0.67 | 1.12 |
| Listening | OP | VR025404 | *Listen to a Story* | 0.45 | 0.50 | 1.54 |
| Listening | OP | VR025544 | *Listen to a Story* | 0.86 | 0.68 | 1.35 |
| Listening | OP | VR025545 | *Listen to a Story* | 0.55 | 0.62 | 3.06 |
| Listening | OP | VR025546 | *Listen to a Story* | 0.68 | 0.63 | 2.74 |
| Listening | OP | VR027125 | *Listen to an Oral Presentation* | 0.31 | 0.59 | 4.95 |
| Listening | OP | VR027126 | *Listen to an Oral Presentation* | 0.49 | 0.54 | 5.90 |
| Listening | OP | VR027127 | *Listen to an Oral Presentation* | 0.89 | 0.64 | 1.89 |
| Listening | OP | VR058901 | *Listen to an Oral Presentation* | 0.51 | 0.70 | 5.44 |
| Listening | OP | VR058909 | *Listen to an Oral Presentation* | 0.30 | 0.53 | 3.70 |
| Listening | OP | VR059595 | *Listen to an Oral Presentation* | 0.82 | 0.60 | 2.90 |
| Listening | OP | VR296036 | *Listen to a Story* | 0.49 | 0.62 | 3.13 |
| Listening | OP | VR296053 | *Listen to a Story* | 0.52 | 0.66 | 4.49 |
| Listening | OP | VR296062 | *Listen to a Story* | 0.54 | 0.55 | 0.57 |
| Listening | OP | VR296162 | *Listen to a Short Exchange* | 0.73 | 0.51 | 1.66 |
| Listening | OP | VR296170 | *Listen to a Short Exchange* | 0.62 | 0.73 | 4.25 |
| Listening | FT | VR531238 | *Listen to an Oral Presentation* | 0.61 | 0.50 | 6.86 |
| Listening | FT | VR531239 | *Listen to an Oral Presentation* | 0.90 | 0.64 | 2.44 |
| Listening | FT | VR531240 | *Listen to an Oral Presentation* | 0.64 | 0.55 | 4.46 |
| Listening | FT | VR531493 | *Listen to a Short Exchange* | 0.63 | 0.56 | 1.69 |
| Listening | FT | VR531503 | *Listen to a Story* | 0.48 | 0.45 | 2.11 |
| Listening | FT | VR531505 | *Listen to a Story* | 0.57 | 0.48 | 2.68 |
| Listening | FT | VR531506 | *Listen to a Story* | 0.55 | 0.69 | 4.13 |
| Reading | OP | VR001442 | *Read-Along Information* | 0.67 | 0.73 | 4.76 |
| Reading | OP | VR001443 | *Read-Along Information* | 0.82 | 0.65 | 1.77 |
| Reading | OP | VR001444 | *Read-Along Information* | 0.75 | 0.54 | 5.16 |
| Reading | OP | VR001517 | *Read-Along Information* | 0.79 | 0.65 | 2.60 |
| Reading | OP | VR001518 | *Read-Along Information* | 0.73 | 0.56 | 3.09 |
| Reading | OP | VR001519 | *Read-Along Information* | 0.61 | 0.69 | 4.58 |
| Reading | OP | VR002245 | *Read-Along Word with Scaffolding* | 0.87 | 0.62 | 1.01 |
| Reading | OP | VR002272 | *Read-Along Word with Scaffolding* | 0.68 | 0.65 | 1.57 |
| Reading | FT | VR291359 | *Read-Along Story with Scaffolding* | 0.88 | 0.52 | 1.78 |
| Reading | FT | VR291364 | *Read-Along Story with Scaffolding* | 0.55 | 0.50 | 2.76 |
| Reading | FT | VR291373 | *Read-Along Story with Scaffolding* | 0.75 | 0.54 | 3.89 |
| Reading | OP | VR291447 | *Read-Along Story with Scaffolding* | 0.69 | 0.67 | 3.06 |
| Reading | OP | VR291451 | *Read-Along Story with Scaffolding* | 0.77 | 0.59 | 1.61 |
| Reading | OP | VR291460 | *Read-Along Story with Scaffolding* | 0.72 | 0.70 | 8.81 |
| Reading | FT | VR546400 | *Read-Along Information* | 0.64 | 0.45 | 3.03 |
| Reading | FT | VR546402 | *Read-Along Information* | 0.84 | 0.54 | 5.03 |
| Reading | FT | VR546415 | *Read-Along Information* | 0.25 | 0.37 | 9.14 |
| Reading | FT | VR546441 | *Read-Along Information* | 0.64 | 0.42 | 8.38 |
| Reading | FT | VR546465 | *Read-Along Information* | 0.46 | 0.42 | 4.92 |
| Reading | FT | VR546472 | *Read-Along Information* | 0.73 | 0.36 | 2.65 |
| Reading | FT | VR552041 | *Read-Along Word with Scaffolding* | 0.78 | 0.57 | 2.51 |
| Reading | FT | VR552048 | *Read-Along Word with Scaffolding* | 0.87 | 0.54 | 0.97 |

Table 8.A.10 Dichotomous Item Statistics for Listening and Reading—Grade One

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Domain** | **OP/FT** | **Item ID** | **Task Type** | ***p*-value** | **Item-Total Correlation** | **Percent Omit Rate** |
| Listening | OP | VR023802 | *Listen to a Story* | 0.89 | 0.69 | 0.96 |
| Listening | OP | VR023803 | *Listen to a Story* | 0.86 | 0.53 | 0.64 |
| Listening | OP | VR023804 | *Listen to a Story* | 0.94 | 0.58 | 0.71 |
| Listening | FT | VR023889 | *Listen to a Short Exchange* | 0.48 | 0.42 | 0.43 |
| Listening | FT | VR023917 | *Listen to a Short Exchange* | 0.85 | 0.41 | 0.55 |
| Listening | FT | VR023944 | *Listen to a Short Exchange* | 0.69 | 0.32 | 0.55 |
| Listening | OP | VR023946 | *Listen to a Short Exchange* | 0.73 | 0.27 | 0.46 |
| Listening | OP | VR069276 | *Listen to a Story* | 0.85 | 0.59 | 0.99 |
| Listening | OP | VR069277 | *Listen to a Story* | 0.54 | 0.45 | 1.26 |
| Listening | OP | VR069278 | *Listen to a Story* | 0.83 | 0.50 | 0.79 |
| Listening | OP | VR127580 | *Listen to an Oral Presentation* | 0.57 | 0.53 | 2.73 |
| Listening | OP | VR127581 | *Listen to an Oral Presentation* | 0.70 | 0.55 | 1.74 |
| Listening | OP | VR127582 | *Listen to an Oral Presentation* | 0.54 | 0.56 | 2.01 |
| Listening | OP | VR127674 | *Listen to an Oral Presentation* | 0.61 | 0.56 | 1.28 |
| Listening | OP | VR127675 | *Listen to an Oral Presentation* | 0.35 | 0.41 | 1.94 |
| Listening | OP | VR127676 | *Listen to an Oral Presentation* | 0.96 | 0.54 | 0.93 |
| Listening | FT | VR127712 | *Listen to a Story* | 0.87 | 0.66 | 0.68 |
| Listening | FT | VR127713 | *Listen to a Story* | 0.78 | 0.48 | 0.86 |
| Listening | FT | VR127714 | *Listen to a Story* | 0.85 | 0.59 | 0.68 |
| Listening | OP | VR127795 | *Listen to a Story* | 0.59 | 0.45 | 0.80 |
| Listening | OP | VR127796 | *Listen to a Story* | 0.98 | 0.65 | 0.44 |
| Listening | OP | VR127797 | *Listen to a Story* | 0.93 | 0.69 | 0.66 |
| Listening | OP | VR295990 | *Listen to a Classroom Conversation* | 0.79 | 0.44 | 0.83 |
| Listening | OP | VR296018 | *Listen to a Classroom Conversation* | 0.63 | 0.50 | 1.46 |
| Listening | OP | VR296715 | *Listen to a Short Exchange* | 0.76 | 0.42 | 0.49 |
| Listening | OP | VR297479 | *Listen to an Oral Presentation* | 0.80 | 0.59 | 1.49 |
| Listening | OP | VR297511 | *Listen to an Oral Presentation* | 0.61 | 0.60 | 1.94 |
| Listening | OP | VR297540 | *Listen to an Oral Presentation* | 0.63 | 0.57 | 2.47 |
| Listening | FT | VR531564 | *Listen to a Classroom Conversation* | 0.77 | 0.39 | 0.37 |
| Listening | FT | VR531575 | *Listen to a Classroom Conversation* | 0.92 | 0.48 | 0.31 |
| Listening | FT | VR531713 | *Listen to a Story* | 0.82 | 0.45 | 0.99 |
| Listening | FT | VR531714 | *Listen to a Story* | 0.93 | 0.69 | 1.05 |
| Listening | FT | VR531715 | *Listen to a Story* | 0.87 | 0.41 | 1.05 |
| Reading | OP | VR000208 | *Read and Choose a Sentence* | 0.80 | 0.64 | 1.04 |
| Reading | OP | VR000487 | *Read a Short Informational Passage* | 0.73 | 0.73 | 8.25 |
| Reading | OP | VR000488 | *Read a Short Informational Passage* | 0.56 | 0.71 | 7.87 |
| Reading | OP | VR000489 | *Read a Short Informational Passage* | 0.53 | 0.71 | 7.85 |
| Reading | OP | VR000862 | *Read and Choose a Sentence* | 0.85 | 0.70 | 0.54 |
| Reading | OP | VR000867 | *Read and Choose a Sentence* | 0.80 | 0.67 | 0.53 |
| Reading | FT | VR000868 | *Read and Choose a Sentence* | 0.78 | 0.52 | 0.60 |
| Reading | OP | VR001132 | *Read and Choose a Word* | 0.84 | 0.66 | 0.88 |
| Reading | OP | VR001325 | *Read and Choose a Word* | 0.86 | 0.65 | 0.52 |
| Reading | OP | VR002342 | *Read an Informational Passage* | 0.57 | 0.71 | 12.13 |
| Reading | OP | VR002343 | *Read an Informational Passage* | 0.43 | 0.65 | 12.37 |
| Reading | OP | VR002345 | *Read an Informational Passage* | 0.61 | 0.72 | 12.08 |
| Reading | OP | VR003207 | *Read an Informational Passage* | 0.44 | 0.66 | 12.93 |
| Reading | OP | VR003208 | *Read an Informational Passage* | 0.48 | 0.74 | 12.84 |
| Reading | OP | VR003209 | *Read an Informational Passage* | 0.42 | 0.68 | 12.13 |
| Reading | OP | VR057947 | *Read and Choose a Sentence* | 0.72 | 0.67 | 0.58 |
| Reading | FT | VR129557 | *Read an Informational Passage* | 0.61 | 0.51 | 11.37 |
| Reading | FT | VR129558 | *Read an Informational Passage* | 0.37 | 0.49 | 11.86 |
| Reading | FT | VR129559 | *Read an Informational Passage* | 0.49 | 0.65 | 12.26 |
| Reading | OP | VR291712 | *Read a Literary Passage* | 0.53 | 0.77 | 11.71 |
| Reading | OP | VR291713 | *Read a Literary Passage* | 0.66 | 0.75 | 11.88 |
| Reading | OP | VR291715 | *Read a Literary Passage* | 0.59 | 0.74 | 11.64 |
| Reading | OP | VR291756 | *Read a Short Informational Passage* | 0.73 | 0.71 | 4.99 |
| Reading | OP | VR291770 | *Read a Short Informational Passage* | 0.57 | 0.66 | 5.15 |
| Reading | OP | VR291776 | *Read a Short Informational Passage* | 0.81 | 0.62 | 4.30 |
| Reading | FT | VR546425 | *Read and Choose a Sentence* | 0.84 | 0.69 | 0.83 |
| Reading | FT | VR554258 | *Read and Choose a Sentence* | 0.78 | 0.63 | 1.10 |
| Reading | FT | VR554631 | *Read and Choose a Sentence* | 0.72 | 0.55 | 0.67 |
| Reading | FT | VR554674 | *Read and Choose a Word* | 0.86 | 0.52 | 1.00 |
| Reading | FT | VR554712 | *Read and Choose a Word* | 0.90 | 0.56 | 1.30 |
| Reading | FT | VR554744 | *Read an Informational Passage* | 0.57 | 0.77 | 14.67 |
| Reading | FT | VR554748 | *Read an Informational Passage* | 0.59 | 0.54 | 16.67 |
| Reading | FT | VR554754 | *Read an Informational Passage* | 0.62 | 0.64 | 15.17 |
| Reading | FT | VR554847 | *Read a Literary Passage* | 0.61 | 0.71 | 10.47 |
| Reading | FT | VR554961 | *Read a Literary Passage* | 0.42 | 0.50 | 10.87 |
| Reading | FT | VR554989 | *Read a Literary Passage* | 0.33 | 0.47 | 11.47 |
| Reading | FT | VR555041 | *Read a Short Informational Passage* | 0.54 | 0.48 | 8.57 |
| Reading | FT | VR555042 | *Read an Informational Passage* | 0.51 | 0.53 | 9.47 |
| Reading | FT | VR555059 | *Read a Short Informational Passage* | 0.74 | 0.67 | 8.97 |
| Reading | FT | VR555063 | *Read a Short Informational Passage* | 0.56 | 0.65 | 10.17 |
| Reading | FT | VR555064 | *Read a Short Informational Passage* | 0.70 | 0.61 | 10.33 |
| Reading | FT | VR555065 | *Read a Short Informational Passage* | 0.51 | 0.38 | 11.33 |

Table 8.A.11 Dichotomous Item Statistics for Listening and Reading—Grade Two

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Domain** | **OP/FT** | **Item ID** | **Task Type** | ***p*-value** | **Item-Total Correlation** | **Percent Omit Rate** |
| Listening | OP | VR008147 | *Listen to a Short Exchange* | 0.95 | 0.50 | 0.06 |
| Listening | OP | VR008322 | *Listen to a Short Exchange* | 0.82 | 0.48 | 0.03 |
| Listening | FT | VR025896 | *Listen to a Story* | 0.47 | 0.37 | 0.19 |
| Listening | FT | VR025897 | *Listen to a Story* | 0.82 | 0.51 | 0.19 |
| Listening | FT | VR025898 | *Listen to a Story* | 0.81 | 0.53 | 0.19 |
| Listening | OP | VR026210 | *Listen to a Story* | 0.92 | 0.68 | 0.23 |
| Listening | OP | VR026211 | *Listen to a Story* | 0.83 | 0.63 | 0.25 |
| Listening | OP | VR026212 | *Listen to a Story* | 0.77 | 0.59 | 0.22 |
| Listening | OP | VR026254 | *Listen to a Story* | 0.74 | 0.53 | 0.37 |
| Listening | OP | VR026255 | *Listen to a Story* | 0.87 | 0.58 | 0.35 |
| Listening | OP | VR026256 | *Listen to a Story* | 0.94 | 0.58 | 0.35 |
| Listening | FT | VR026284 | *Listen to a Story* | 0.94 | 0.64 | 0.10 |
| Listening | FT | VR026285 | *Listen to a Story* | 0.90 | 0.45 | 0.15 |
| Listening | FT | VR026286 | *Listen to a Story* | 0.85 | 0.52 | 0.15 |
| Listening | OP | VR027965 | *Listen to an Oral Presentation* | 0.61 | 0.56 | 0.64 |
| Listening | OP | VR027966 | *Listen to an Oral Presentation* | 0.56 | 0.37 | 0.65 |
| Listening | OP | VR027967 | *Listen to an Oral Presentation* | 0.70 | 0.51 | 0.64 |
| Listening | OP | VR069429 | *Listen to an Oral Presentation* | 0.69 | 0.53 | 0.84 |
| Listening | OP | VR069430 | *Listen to an Oral Presentation* | 0.47 | 0.50 | 0.84 |
| Listening | OP | VR069431 | *Listen to an Oral Presentation* | 0.56 | 0.46 | 0.83 |
| Listening | OP | VR069577 | *Listen to a Story* | 0.92 | 0.71 | 0.47 |
| Listening | OP | VR069578 | *Listen to a Story* | 0.75 | 0.57 | 0.50 |
| Listening | OP | VR069579 | *Listen to a Story* | 0.48 | 0.55 | 0.52 |
| Listening | OP | VR126860 | *Listen to an Oral Presentation* | 0.56 | 0.58 | 0.75 |
| Listening | OP | VR126861 | *Listen to an Oral Presentation* | 0.61 | 0.48 | 0.75 |
| Listening | OP | VR126862 | *Listen to an Oral Presentation* | 0.54 | 0.46 | 0.77 |
| Listening | OP | VR126891 | *Listen to a Classroom Conversation* | 0.56 | 0.45 | 0.05 |
| Listening | OP | VR126892 | *Listen to a Classroom Conversation* | 0.79 | 0.52 | 0.06 |
| Listening | FT | VR530330 | *Listen to a Classroom Conversation* | 0.72 | 0.24 | 0.00 |
| Listening | FT | VR530331 | *Listen to a Classroom Conversation* | 0.80 | 0.33 | 0.05 |
| Listening | FT | VR530554 | *Listen to a Short Exchange* | 0.95 | 0.49 | 0.05 |
| Listening | FT | VR530591 | *Listen to a Short Exchange* | 0.98 | 0.39 | 0.00 |
| Listening | FT | VR530600 | *Listen to a Short Exchange* | 0.58 | 0.37 | 0.05 |
| Reading | OP | VR000398 | *Read a Short Informational Passage* | 0.60 | 0.57 | 0.41 |
| Reading | OP | VR000399 | *Read a Short Informational Passage* | 0.78 | 0.49 | 0.32 |
| Reading | OP | VR000400 | *Read a Short Informational Passage* | 0.88 | 0.49 | 0.25 |
| Reading | FT | VR000876 | *Read and Choose a Sentence* | 0.77 | 0.61 | 0.00 |
| Reading | OP | VR000877 | *Read and Choose a Sentence* | 0.80 | 0.60 | 0.07 |
| Reading | OP | VR000880 | *Read and Choose a Sentence* | 0.87 | 0.71 | 0.02 |
| Reading | FT | VR000881 | *Read and Choose a Sentence* | 0.50 | 0.51 | 0.00 |
| Reading | OP | VR000885 | *Read and Choose a Sentence* | 0.83 | 0.73 | 0.11 |
| Reading | OP | VR000890 | *Read and Choose a Sentence* | 0.88 | 0.72 | 0.06 |
| Reading | OP | VR002582 | *Read a Literary Passage* | 0.58 | 0.68 | 4.41 |
| Reading | OP | VR002583 | *Read a Literary Passage* | 0.83 | 0.69 | 4.40 |
| Reading | OP | VR002584 | *Read a Literary Passage* | 0.74 | 0.80 | 4.37 |
| Reading | OP | VR002585 | *Read a Literary Passage* | 0.75 | 0.74 | 4.41 |
| Reading | OP | VR002824 | *Read a Literary Passage* | 0.78 | 0.80 | 3.69 |
| Reading | OP | VR002825 | *Read a Literary Passage* | 0.71 | 0.74 | 3.68 |
| Reading | OP | VR002826 | *Read a Literary Passage* | 0.75 | 0.81 | 3.68 |
| Reading | OP | VR002827 | *Read a Literary Passage* | 0.65 | 0.57 | 3.59 |
| Reading | FT | VR002858 | *Read a Literary Passage* | 0.59 | 0.58 | 3.51 |
| Reading | FT | VR002859 | *Read a Literary Passage* | 0.65 | 0.60 | 3.64 |
| Reading | FT | VR002860 | *Read a Literary Passage* | 0.63 | 0.60 | 3.57 |
| Reading | FT | VR002861 | *Read a Literary Passage* | 0.72 | 0.65 | 3.44 |
| Reading | FT | VR003421 | *Read an Informational Passage* | 0.67 | 0.67 | 7.60 |
| Reading | FT | VR003422 | *Read an Informational Passage* | 0.40 | 0.66 | 7.50 |
| Reading | FT | VR003423 | *Read an Informational Passage* | 0.47 | 0.50 | 7.60 |
| Reading | FT | VR003424 | *Read an Informational Passage* | 0.63 | 0.65 | 7.60 |
| Reading | FT | VR003444 | *Read an Informational Passage* | 0.61 | 0.58 | 3.97 |
| Reading | FT | VR003445 | *Read an Informational Passage* | 0.72 | 0.61 | 3.97 |
| Reading | FT | VR003446 | *Read an Informational Passage* | 0.53 | 0.55 | 3.97 |
| Reading | FT | VR003447 | *Read an Informational Passage* | 0.72 | 0.70 | 4.10 |
| Reading | OP | VR060237 | *Read an Informational Passage* | 0.66 | 0.58 | 4.85 |
| Reading | OP | VR060242 | *Read an Informational Passage* | 0.57 | 0.68 | 4.92 |
| Reading | OP | VR060248 | *Read an Informational Passage* | 0.61 | 0.64 | 4.91 |
| Reading | OP | VR060250 | *Read an Informational Passage* | 0.62 | 0.69 | 4.91 |
| Reading | OP | VR127064 | *Read an Informational Passage* | 0.70 | 0.76 | 4.84 |
| Reading | OP | VR127065 | *Read an Informational Passage* | 0.57 | 0.56 | 4.91 |
| Reading | OP | VR127066 | *Read an Informational Passage* | 0.52 | 0.46 | 4.98 |
| Reading | OP | VR127067 | *Read an Informational Passage* | 0.40 | 0.35 | 4.91 |
| Reading | OP | VR296648 | *Read a Short Informational Passage* | 0.57 | 0.65 | 2.49 |
| Reading | OP | VR296754 | *Read a Short Informational Passage* | 0.64 | 0.63 | 2.74 |
| Reading | OP | VR296790 | *Read a Short Informational Passage* | 0.71 | 0.72 | 2.70 |
| Reading | FT | VR545688 | *Read and Choose a Sentence* | 0.87 | 0.73 | 0.00 |
| Reading | FT | VR545692 | *Read and Choose a Sentence* | 0.86 | 0.72 | 0.20 |
| Reading | FT | VR545697 | *Read an Informational Passage* | 0.60 | 0.67 | 7.08 |
| Reading | FT | VR545698 | *Read an Informational Passage* | 0.76 | 0.70 | 7.29 |
| Reading | FT | VR545699 | *Read an Informational Passage* | 0.57 | 0.60 | 7.19 |
| Reading | FT | VR545700 | *Read an Informational Passage* | 0.48 | 0.57 | 7.29 |
| Reading | FT | VR546296 | *Read a Short Informational Passage* | 0.64 | 0.49 | 0.53 |
| Reading | FT | VR546297 | *Read a Short Informational Passage* | 0.60 | 0.54 | 0.60 |
| Reading | FT | VR546299 | *Read a Short Informational Passage* | 0.57 | 0.45 | 0.53 |
| Reading | FT | VR546380 | *Read a Short Informational Passage* | 0.50 | 0.41 | 2.71 |
| Reading | FT | VR546381 | *Read a Short Informational Passage* | 0.41 | 0.26 | 2.40 |
| Reading | FT | VR546382 | *Read a Short Informational Passage* | 0.83 | 0.35 | 2.08 |

Table 8.A.12 Dichotomous Item Statistics for Listening and Reading—Grade Span Three Through Five

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Domain** | **OP/FT** | **Item ID** | **Task Type** | ***p*-value** | **Item-Total Correlation** | **Percent Omit Rate** |
| Listening | OP | VR008931 | *Listen to a Short Exchange* | 0.89 | 0.55 | 0.01 |
| Listening | OP | VR008961 | *Listen to a Short Exchange* | 0.93 | 0.64 | 0.00 |
| Listening | OP | VR008997 | *Listen to a Short Exchange* | 0.86 | 0.54 | 0.00 |
| Listening | FT | VR009026 | *Listen to a Short Exchange* | 0.85 | 0.55 | 0.00 |
| Listening | OP | VR021733 | *Listen to a Classroom Conversation* | 0.89 | 0.54 | 0.00 |
| Listening | OP | VR021734 | *Listen to a Classroom Conversation* | 0.91 | 0.50 | 0.01 |
| Listening | OP | VR021735 | *Listen to a Classroom Conversation* | 0.90 | 0.61 | 0.01 |
| Listening | OP | VR027010 | *Listen to a Story* | 0.85 | 0.63 | 0.04 |
| Listening | OP | VR027011 | *Listen to a Story* | 0.60 | 0.46 | 0.05 |
| Listening | OP | VR027012 | *Listen to a Story* | 0.79 | 0.53 | 0.04 |
| Listening | OP | VR028285 | *Listen to an Oral Presentation* | 0.51 | 0.35 | 0.08 |
| Listening | OP | VR028286 | *Listen to an Oral Presentation* | 0.53 | 0.51 | 0.08 |
| Listening | OP | VR028288 | *Listen to an Oral Presentation* | 0.41 | 0.35 | 0.08 |
| Listening | OP | VR028289 | *Listen to an Oral Presentation* | 0.47 | 0.47 | 0.08 |
| Listening | FT | VR069573 | *Listen to a Story* | 0.80 | 0.44 | 0.04 |
| Listening | FT | VR069574 | *Listen to a Story* | 0.86 | 0.62 | 0.04 |
| Listening | FT | VR069575 | *Listen to a Story* | 0.62 | 0.33 | 0.04 |
| Listening | OP | VR127482 | *Listen to an Oral Presentation* | 0.83 | 0.54 | 0.06 |
| Listening | OP | VR127483 | *Listen to an Oral Presentation* | 0.78 | 0.55 | 0.06 |
| Listening | OP | VR127485 | *Listen to an Oral Presentation* | 0.72 | 0.54 | 0.07 |
| Listening | OP | VR141166 | *Listen to a Story* | 0.88 | 0.65 | 0.03 |
| Listening | OP | VR141168 | *Listen to a Story* | 0.91 | 0.57 | 0.03 |
| Listening | OP | VR141235 | *Listen to a Story* | 0.64 | 0.45 | 0.03 |
| Listening | OP | VR295383 | *Listen to an Oral Presentation* | 0.76 | 0.53 | 0.08 |
| Listening | OP | VR295384 | *Listen to an Oral Presentation* | 0.74 | 0.57 | 0.08 |
| Listening | OP | VR295388 | *Listen to an Oral Presentation* | 0.69 | 0.51 | 0.08 |
| Listening | FT | VR530775 | *Listen to a Classroom Conversation* | 0.85 | 0.33 | 0.01 |
| Listening | FT | VR530776 | *Listen to a Classroom Conversation* | 0.88 | 0.56 | 0.00 |
| Listening | FT | VR530777 | *Listen to a Classroom Conversation* | 0.84 | 0.48 | 0.01 |
| Listening | FT | VR530876 | *Listen to an Oral Presentation* | 0.83 | 0.49 | 0.07 |
| Listening | FT | VR530877 | *Listen to an Oral Presentation* | 0.61 | 0.43 | 0.07 |
| Listening | FT | VR530878 | *Listen to an Oral Presentation* | 0.51 | 0.27 | 0.07 |
| Listening | FT | VR530941 | *Listen to a Short Exchange* | 0.67 | 0.32 | 0.01 |
| Reading | OP | VH985169 | *Read a Student Essay* | 0.27 | 0.40 | 0.09 |
| Reading | OP | VH985171 | *Read a Student Essay* | 0.29 | 0.47 | 0.09 |
| Reading | OP | VH985172 | *Read a Student Essay* | 0.46 | 0.42 | 0.10 |
| Reading | OP | VH985173 | *Read a Student Essay* | 0.29 | 0.38 | 0.10 |
| Reading | OP | VH985174 | *Read a Student Essay* | 0.50 | 0.56 | 0.10 |
| Reading | OP | VH985175 | *Read a Student Essay* | 0.30 | 0.33 | 0.09 |
| Reading | OP | VH991164 | *Read a Short Informational Passage* | 0.44 | 0.58 | 0.01 |
| Reading | OP | VH991165 | *Read a Short Informational Passage* | 0.44 | 0.59 | 0.01 |
| Reading | OP | VH991166 | *Read a Short Informational Passage* | 0.62 | 0.67 | 0.00 |
| Reading | FT | VH992093 | *Read and Choose a Sentence* | 0.80 | 0.48 | 0.00 |
| Reading | OP | VH992102 | *Read and Choose a Sentence* | 0.84 | 0.70 | 0.02 |
| Reading | OP | VH992105 | *Read and Choose a Sentence* | 0.89 | 0.76 | 0.00 |
| Reading | OP | VR128230 | *Read an Informational Passage* | 0.34 | 0.42 | 0.13 |
| Reading | OP | VR128231 | *Read an Informational Passage* | 0.47 | 0.41 | 0.12 |
| Reading | OP | VR128232 | *Read an Informational Passage* | 0.32 | 0.56 | 0.13 |
| Reading | OP | VR128234 | *Read an Informational Passage* | 0.24 | 0.21 | 0.13 |
| Reading | OP | VR128235 | *Read an Informational Passage* | 0.34 | 0.46 | 0.13 |
| Reading | OP | VR128237 | *Read an Informational Passage* | 0.44 | 0.36 | 0.13 |
| Reading | OP | VR128975 | *Read a Short Informational Passage* | 0.38 | 0.55 | 0.06 |
| Reading | OP | VR128976 | *Read a Short Informational Passage* | 0.54 | 0.65 | 0.06 |
| Reading | OP | VR128980 | *Read a Short Informational Passage* | 0.59 | 0.66 | 0.06 |
| Reading | OP | VR297550 | *Read a Literary Passage* | 0.58 | 0.79 | 0.11 |
| Reading | OP | VR297833 | *Read a Literary Passage* | 0.74 | 0.78 | 0.11 |
| Reading | OP | VR297844 | *Read a Literary Passage* | 0.58 | 0.70 | 0.11 |
| Reading | OP | VR297903 | *Read a Literary Passage* | 0.66 | 0.75 | 0.11 |
| Reading | OP | VR297912 | *Read a Literary Passage* | 0.54 | 0.66 | 0.11 |
| Reading | OP | VR297916 | *Read a Literary Passage* | 0.45 | 0.51 | 0.11 |
| Reading | FT | VR554368 | *Read and Choose a Sentence* | 0.88 | 0.75 | 0.00 |
| Reading | FT | VR554440 | *Read and Choose a Sentence* | 0.89 | 0.52 | 0.00 |
| Reading | FT | VR554518 | *Read an Informational Passage* | 0.34 | 0.40 | 0.03 |
| Reading | FT | VR554702 | *Read an Informational Passage* | 0.65 | 0.50 | 0.03 |
| Reading | FT | VR554705 | *Read an Informational Passage* | 0.24 | 0.13 | 0.03 |
| Reading | FT | VR554707 | *Read an Informational Passage* | 0.36 | 0.28 | 0.03 |
| Reading | FT | VR554713 | *Read an Informational Passage* | 0.54 | 0.48 | 0.03 |
| Reading | FT | VR554714 | *Read an Informational Passage* | 0.30 | 0.37 | 0.03 |
| Reading | FT | VR554745 | *Read a Literary Passage* | 0.48 | 0.49 | 0.13 |
| Reading | FT | VR554747 | *Read a Literary Passage* | 0.60 | 0.51 | 0.13 |
| Reading | FT | VR554749 | *Read a Literary Passage* | 0.56 | 0.68 | 0.10 |
| Reading | FT | VR554751 | *Read a Literary Passage* | 0.61 | 0.56 | 0.13 |
| Reading | FT | VR554760 | *Read a Short Informational Passage* | 0.60 | 0.57 | 0.03 |
| Reading | FT | VR554763 | *Read a Short Informational Passage* | 0.47 | 0.30 | 0.03 |
| Reading | FT | VR554773 | *Read a Short Informational Passage* | 0.42 | 0.44 | 0.03 |
| Reading | FT | VR554778 | *Read a Short Informational Passage* | 0.48 | 0.36 | 0.03 |

Table 8.A.13 Dichotomous Item Statistics for Listening and Reading—Grade Span Six Through Eight

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Domain** | **OP/FT** | **Item ID** | **Task Type** | ***p*-value** | **Item-Total Correlation** | **Percent Omit Rate** |
| Listening | OP | VR008445 | *Listen to a Short Exchange* | 0.96 | 0.63 | 0.00 |
| Listening | OP | VR008519 | *Listen to a Short Exchange* | 0.87 | 0.63 | 0.00 |
| Listening | OP | VR008578 | *Listen to a Short Exchange* | 0.77 | 0.56 | 0.00 |
| Listening | FT | VR008872 | *Listen to a Short Exchange* | 0.63 | 0.30 | 0.00 |
| Listening | OP | VR009173 | *Listen to a Classroom Conversation* | 0.86 | 0.46 | 0.00 |
| Listening | OP | VR009174 | *Listen to a Classroom Conversation* | 0.92 | 0.56 | 0.01 |
| Listening | OP | VR009175 | *Listen to a Classroom Conversation* | 0.88 | 0.56 | 0.01 |
| Listening | OP | VR023079 | *Listen to a Speaker Support an Opinion* | 0.72 | 0.52 | 0.02 |
| Listening | OP | VR023080 | *Listen to a Speaker Support an Opinion* | 0.75 | 0.50 | 0.02 |
| Listening | OP | VR023082 | *Listen to a Speaker Support an Opinion* | 0.81 | 0.64 | 0.02 |
| Listening | OP | VR023083 | *Listen to a Speaker Support an Opinion* | 0.79 | 0.58 | 0.02 |
| Listening | FT | VR069917 | *Listen to a Classroom Conversation* | 0.44 | 0.36 | 0.04 |
| Listening | FT | VR069918 | *Listen to a Classroom Conversation* | 0.72 | 0.36 | 0.06 |
| Listening | FT | VR069919 | *Listen to a Classroom Conversation* | 0.52 | 0.26 | 0.06 |
| Listening | OP | VR072363 | *Listen to a Speaker Support an Opinion* | 0.73 | 0.67 | 0.02 |
| Listening | OP | VR072365 | *Listen to a Speaker Support an Opinion* | 0.50 | 0.56 | 0.02 |
| Listening | OP | VR072366 | *Listen to a Speaker Support an Opinion* | 0.75 | 0.64 | 0.02 |
| Listening | OP | VR072367 | *Listen to a Speaker Support an Opinion* | 0.65 | 0.57 | 0.02 |
| Listening | OP | VR193985 | *Listen to an Oral Presentation* | 0.85 | 0.59 | 0.01 |
| Listening | OP | VR194003 | *Listen to an Oral Presentation* | 0.81 | 0.54 | 0.01 |
| Listening | OP | VR194015 | *Listen to an Oral Presentation* | 0.59 | 0.59 | 0.01 |
| Listening | OP | VR294690 | *Listen to an Oral Presentation* | 0.49 | 0.27 | 0.01 |
| Listening | OP | VR294711 | *Listen to an Oral Presentation* | 0.64 | 0.45 | 0.01 |
| Listening | OP | VR294713 | *Listen to an Oral Presentation* | 0.78 | 0.57 | 0.02 |
| Listening | OP | VR294716 | *Listen to an Oral Presentation* | 0.72 | 0.53 | 0.02 |
| Listening | OP | VR301989 | *Listen to an Oral Presentation* | 0.58 | 0.49 | 0.01 |
| Listening | FT | VR531853 | *Listen to a Speaker Support an Opinion* | 0.84 | 0.54 | 0.07 |
| Listening | FT | VR531854 | *Listen to a Speaker Support an Opinion* | 0.43 | 0.03 | 0.07 |
| Listening | FT | VR531855 | *Listen to a Speaker Support an Opinion* | 0.43 | 0.37 | 0.07 |
| Listening | FT | VR531856 | *Listen to a Speaker Support an Opinion* | 0.71 | 0.51 | 0.07 |
| Reading | OP | VH990947 | *Read a Short Informational Passage* | 0.55 | 0.47 | 0.00 |
| Reading | OP | VH990948 | *Read a Short Informational Passage* | 0.63 | 0.57 | 0.00 |
| Reading | OP | VH990950 | *Read a Short Informational Passage* | 0.26 | 0.42 | 0.01 |
| Reading | OP | VH991333 | *Read an Informational Passage* | 0.40 | 0.38 | 0.02 |
| Reading | OP | VH991334 | *Read an Informational Passage* | 0.34 | 0.58 | 0.02 |
| Reading | OP | VH991335 | *Read an Informational Passage* | 0.52 | 0.53 | 0.02 |
| Reading | OP | VH991336 | *Read an Informational Passage* | 0.37 | 0.49 | 0.02 |
| Reading | OP | VH991338 | *Read an Informational Passage* | 0.45 | 0.40 | 0.02 |
| Reading | OP | VH991339 | *Read an Informational Passage* | 0.43 | 0.53 | 0.02 |
| Reading | OP | VR066640 | *Read a Literary Passage* | 0.59 | 0.47 | 0.01 |
| Reading | OP | VR066898 | *Read a Literary Passage* | 0.60 | 0.57 | 0.01 |
| Reading | OP | VR067119 | *Read a Literary Passage* | 0.63 | 0.54 | 0.01 |
| Reading | OP | VR067121 | *Read a Literary Passage* | 0.61 | 0.58 | 0.01 |
| Reading | OP | VR067271 | *Read a Literary Passage* | 0.61 | 0.67 | 0.01 |
| Reading | OP | VR067274 | *Read a Literary Passage* | 0.58 | 0.58 | 0.01 |
| Reading | OP | VR195084 | *Read a Short Informational Passage* | 0.71 | 0.49 | 0.00 |
| Reading | OP | VR195095 | *Read a Short Informational Passage* | 0.80 | 0.51 | 0.00 |
| Reading | OP | VR195103 | *Read a Short Informational Passage* | 0.67 | 0.56 | 0.01 |
| Reading | OP | VR287793 | *Read a Student Essay* | 0.65 | 0.71 | 0.02 |
| Reading | OP | VR287797 | *Read a Student Essay* | 0.62 | 0.44 | 0.02 |
| Reading | OP | VR287801 | *Read a Student Essay* | 0.46 | 0.38 | 0.01 |
| Reading | OP | VR287819 | *Read a Student Essay* | 0.51 | 0.61 | 0.01 |
| Reading | OP | VR287826 | *Read a Student Essay* | 0.51 | 0.58 | 0.01 |
| Reading | OP | VR287920 | *Read a Student Essay* | 0.68 | 0.66 | 0.02 |
| Reading | OP | VR287925 | *Read a Student Essay* | 0.75 | 0.67 | 0.02 |
| Reading | OP | VR287929 | *Read a Student Essay* | 0.51 | 0.55 | 0.02 |
| Reading | FT | VR555113 | *Read a Literary Passage* | 0.69 | 0.57 | 0.00 |
| Reading | FT | VR555114 | *Read a Literary Passage* | 0.77 | 0.59 | 0.00 |
| Reading | FT | VR555115 | *Read a Literary Passage* | 0.78 | 0.51 | 0.00 |
| Reading | FT | VR555117 | *Read a Literary Passage* | 0.69 | 0.57 | 0.00 |
| Reading | FT | VR555118 | *Read a Literary Passage* | 0.62 | 0.50 | 0.00 |
| Reading | FT | VR555119 | *Read a Literary Passage* | 0.63 | 0.47 | 0.00 |
| Reading | FT | VR555125 | *Read a Student Essay* | 0.64 | 0.46 | 0.00 |
| Reading | FT | VR555126 | *Read a Student Essay* | 0.71 | 0.58 | 0.00 |
| Reading | FT | VR555127 | *Read a Student Essay* | 0.59 | 0.34 | 0.00 |
| Reading | FT | VR555138 | *Read a Student Essay* | 0.54 | 0.42 | 0.00 |
| Reading | FT | VR555140 | *Read a Student Essay* | 0.27 | 0.36 | 0.00 |
| Reading | FT | VR555143 | *Read a Student Essay* | 0.57 | 0.62 | 0.00 |
| Reading | FT | VR555145 | *Read a Student Essay* | 0.36 | 0.18 | 0.00 |
| Reading | FT | VR555147 | *Read a Student Essay* | 0.42 | 0.44 | 0.00 |
| Reading | FT | VR555168 | *Read a Short Informational Passage* | 0.46 | 0.22 | 0.05 |
| Reading | FT | VR555173 | *Read a Short Informational Passage* | 0.65 | 0.50 | 0.05 |
| Reading | FT | VR555183 | *Read a Short Informational Passage* | 0.70 | 0.37 | 0.05 |

Table 8.A.14 Dichotomous Item Statistics for Listening and Reading—Grade Span Nine and Ten

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Domain** | **OP/FT** | **Item ID** | **Task Type** | ***p*-value** | **Item-Total Correlation** | **Percent Omit Rate** |
| Listening | OP | VR008525 | *Listen to a Short Exchange* | 0.87 | 0.49 | 0.00 |
| Listening | OP | VR008649 | *Listen to a Short Exchange* | 0.84 | 0.62 | 0.00 |
| Listening | OP | VR008705 | *Listen to a Short Exchange* | 0.75 | 0.58 | 0.00 |
| Listening | OP | VR021863 | *Listen to a Speaker Support an Opinion* | 0.54 | 0.34 | 0.01 |
| Listening | OP | VR021864 | *Listen to a Speaker Support an Opinion* | 0.39 | 0.47 | 0.01 |
| Listening | OP | VR021865 | *Listen to a Speaker Support an Opinion* | 0.58 | 0.58 | 0.01 |
| Listening | OP | VR021866 | *Listen to a Speaker Support an Opinion* | 0.77 | 0.63 | 0.01 |
| Listening | OP | VR028561 | *Listen to an Oral Presentation* | 0.54 | 0.59 | 0.01 |
| Listening | OP | VR028563 | *Listen to an Oral Presentation* | 0.64 | 0.48 | 0.01 |
| Listening | OP | VR028564 | *Listen to an Oral Presentation* | 0.52 | 0.52 | 0.01 |
| Listening | OP | VR028565 | *Listen to an Oral Presentation* | 0.77 | 0.68 | 0.01 |
| Listening | OP | VR069743 | *Listen to a Classroom Conversation* | 0.74 | 0.66 | 0.00 |
| Listening | OP | VR069744 | *Listen to a Classroom Conversation* | 0.70 | 0.55 | 0.00 |
| Listening | OP | VR069745 | *Listen to a Classroom Conversation* | 0.67 | 0.55 | 0.01 |
| Listening | OP | VR070819 | *Listen to a Speaker Support an Opinion* | 0.75 | 0.70 | 0.01 |
| Listening | OP | VR070820 | *Listen to a Speaker Support an Opinion* | 0.78 | 0.67 | 0.01 |
| Listening | OP | VR070821 | *Listen to a Speaker Support an Opinion* | 0.90 | 0.56 | 0.02 |
| Listening | OP | VR071454 | *Listen to a Speaker Support an Opinion* | 0.87 | 0.58 | 0.01 |
| Listening | OP | VR292495 | *Listen to an Oral Presentation* | 0.53 | 0.47 | 0.01 |
| Listening | OP | VR292510 | *Listen to an Oral Presentation* | 0.49 | 0.42 | 0.01 |
| Listening | OP | VR292524 | *Listen to an Oral Presentation* | 0.40 | 0.47 | 0.01 |
| Listening | OP | VR292530 | *Listen to an Oral Presentation* | 0.77 | 0.57 | 0.01 |
| Listening | FT | VR528943 | *Listen to a Classroom Conversation* | 0.77 | 0.49 | 0.00 |
| Listening | FT | VR528944 | *Listen to a Classroom Conversation* | 0.66 | 0.48 | 0.00 |
| Listening | FT | VR528945 | *Listen to a Classroom Conversation* | 0.83 | 0.59 | 0.00 |
| Listening | FT | VR545635 | *Listen to an Oral Presentation* | 0.46 | 0.10 | 0.00 |
| Listening | FT | VR545638 | *Listen to an Oral Presentation* | 0.30 | 0.30 | 0.00 |
| Listening | FT | VR545639 | *Listen to an Oral Presentation* | 0.46 | 0.35 | 0.00 |
| Listening | FT | VR545640 | *Listen to an Oral Presentation* | 0.71 | 0.44 | 0.00 |
| Listening | FT | VR545687 | *Listen to a Speaker Support an Opinion* | 0.40 | 0.49 | 0.04 |
| Listening | FT | VR545691 | *Listen to a Speaker Support an Opinion* | 0.62 | 0.34 | 0.04 |
| Listening | FT | VR545694 | *Listen to a Speaker Support an Opinion* | 0.60 | 0.46 | 0.04 |
| Listening | FT | VR545702 | *Listen to a Speaker Support an Opinion* | 0.60 | 0.53 | 0.04 |
| Reading | OP | VH985069 | *Read a Student Essay* | 0.59 | 0.61 | 0.00 |
| Reading | OP | VH985070 | *Read a Student Essay* | 0.51 | 0.47 | 0.00 |
| Reading | OP | VH985071 | *Read a Student Essay* | 0.33 | 0.53 | 0.00 |
| Reading | OP | VH985072 | *Read a Student Essay* | 0.47 | 0.43 | 0.00 |
| Reading | OP | VH985073 | *Read a Student Essay* | 0.39 | 0.50 | 0.00 |
| Reading | OP | VH985075 | *Read a Student Essay* | 0.46 | 0.33 | 0.00 |
| Reading | OP | VH985076 | *Read a Student Essay* | 0.65 | 0.49 | 0.00 |
| Reading | OP | VH985077 | *Read a Student Essay* | 0.46 | 0.42 | 0.00 |
| Reading | OP | VH991765 | *Read an Informational Passage* | 0.50 | 0.40 | 0.00 |
| Reading | OP | VH991766 | *Read an Informational Passage* | 0.60 | 0.53 | 0.00 |
| Reading | OP | VH991767 | *Read an Informational Passage* | 0.54 | 0.52 | 0.00 |
| Reading | OP | VH991768 | *Read an Informational Passage* | 0.58 | 0.67 | 0.00 |
| Reading | OP | VH991771 | *Read an Informational Passage* | 0.43 | 0.55 | 0.00 |
| Reading | OP | VH991772 | *Read an Informational Passage* | 0.41 | 0.41 | 0.00 |
| Reading | OP | VR135910 | *Read a Short Informational Passage* | 0.39 | 0.40 | 0.00 |
| Reading | OP | VR135911 | *Read a Short Informational Passage* | 0.51 | 0.58 | 0.00 |
| Reading | OP | VR135913 | *Read a Short Informational Passage* | 0.62 | 0.57 | 0.00 |
| Reading | OP | VR292006 | *Read a Literary Passage* | 0.60 | 0.47 | 0.00 |
| Reading | OP | VR292014 | *Read a Literary Passage* | 0.49 | 0.43 | 0.00 |
| Reading | OP | VR292020 | *Read a Literary Passage* | 0.75 | 0.68 | 0.00 |
| Reading | OP | VR292023 | *Read a Literary Passage* | 0.52 | 0.62 | 0.00 |
| Reading | OP | VR292093 | *Read a Literary Passage* | 0.63 | 0.63 | 0.00 |
| Reading | OP | VR292116 | *Read a Literary Passage* | 0.74 | 0.71 | 0.00 |
| Reading | OP | VR292290 | *Read a Short Informational Passage* | 0.50 | 0.37 | 0.00 |
| Reading | OP | VR292292 | *Read a Short Informational Passage* | 0.71 | 0.58 | 0.00 |
| Reading | OP | VR292445 | *Read a Short Informational Passage* | 0.68 | 0.64 | 0.00 |
| Reading | FT | VR525905 | *Read a Literary Passage* | 0.55 | 0.24 | 0.00 |
| Reading | FT | VR525910 | *Read a Literary Passage* | 0.62 | 0.46 | 0.00 |
| Reading | FT | VR525912 | *Read a Literary Passage* | 0.71 | 0.69 | 0.00 |
| Reading | FT | VR526555 | *Read a Literary Passage* | 0.48 | 0.27 | 0.00 |
| Reading | FT | VR526558 | *Read a Literary Passage* | 0.58 | 0.46 | 0.00 |
| Reading | FT | VR526569 | *Read a Literary Passage* | 0.34 | 0.38 | 0.00 |
| Reading | FT | VR526594 | *Read an Informational Passage* | 0.41 | 0.33 | 0.00 |
| Reading | FT | VR526596 | *Read an Informational Passage* | 0.41 | 0.44 | 0.00 |
| Reading | FT | VR526597 | *Read an Informational Passage* | 0.60 | 0.47 | 0.00 |
| Reading | FT | VR526598 | *Read an Informational Passage* | 0.28 | 0.33 | 0.00 |
| Reading | FT | VR526599 | *Read an Informational Passage* | 0.34 | 0.40 | 0.00 |
| Reading | FT | VR526600 | *Read an Informational Passage* | 0.34 | 0.24 | 0.00 |
| Reading | FT | VR544705 | *Read a Student Essay* | 0.57 | 0.48 | 0.00 |
| Reading | FT | VR544706 | *Read a Student Essay* | 0.53 | 0.33 | 0.00 |
| Reading | FT | VR544707 | *Read a Student Essay* | 0.52 | 0.49 | 0.00 |
| Reading | FT | VR544708 | *Read a Student Essay* | 0.23 | 0.26 | 0.00 |
| Reading | FT | VR544709 | *Read a Student Essay* | 0.28 | 0.14 | 0.00 |
| Reading | FT | VR544710 | *Read a Student Essay* | 0.47 | 0.35 | 0.00 |
| Reading | FT | VR544711 | *Read a Student Essay* | 0.37 | 0.52 | 0.00 |
| Reading | FT | VR544712 | *Read a Student Essay* | 0.51 | 0.51 | 0.00 |
| Reading | FT | VR544727 | *Read a Short Informational Passage* | 0.54 | 0.39 | 0.00 |
| Reading | FT | VR544729 | *Read a Short Informational Passage* | 0.52 | 0.44 | 0.00 |
| Reading | FT | VR544731 | *Read a Short Informational Passage* | 0.33 | 0.01 | 0.00 |

Table 8.A.15 Dichotomous Item Statistics for Listening and Reading—Grade Span Eleven and Twelve

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Domain** | **OP/FT** | **Item ID** | **Task Type** | ***p*-value** | **Item-Total Correlation** | **Percent Omit Rate** |
| Listening | OP | VR007128 | *Listen to a Short Exchange* | 0.68 | 0.63 | 0.00 |
| Listening | OP | VR007153 | *Listen to a Short Exchange* | 0.73 | 0.67 | 0.00 |
| Listening | OP | VR007170 | *Listen to a Short Exchange* | 0.60 | 0.49 | 0.00 |
| Listening | FT | VR007188 | *Listen to a Short Exchange* | 0.80 | 0.58 | 0.00 |
| Listening | FT | VR007223 | *Listen to a Short Exchange* | 0.73 | 0.66 | 0.00 |
| Listening | OP | VR021928 | *Listen to a Speaker Support an Opinion* | 0.77 | 0.64 | 0.02 |
| Listening | OP | VR021932 | *Listen to a Speaker Support an Opinion* | 0.71 | 0.64 | 0.02 |
| Listening | OP | VR021935 | *Listen to a Speaker Support an Opinion* | 0.62 | 0.53 | 0.02 |
| Listening | OP | VR021938 | *Listen to a Speaker Support an Opinion* | 0.75 | 0.53 | 0.02 |
| Listening | OP | VR026988 | *Listen to an Oral Presentation* | 0.59 | 0.49 | 0.01 |
| Listening | OP | VR026989 | *Listen to an Oral Presentation* | 0.50 | 0.42 | 0.01 |
| Listening | OP | VR026990 | *Listen to an Oral Presentation* | 0.50 | 0.38 | 0.01 |
| Listening | OP | VR026991 | *Listen to an Oral Presentation* | 0.58 | 0.51 | 0.01 |
| Listening | OP | VR129889 | *Listen to an Oral Presentation* | 0.72 | 0.56 | 0.00 |
| Listening | OP | VR129890 | *Listen to an Oral Presentation* | 0.65 | 0.50 | 0.00 |
| Listening | OP | VR129892 | *Listen to an Oral Presentation* | 0.62 | 0.61 | 0.00 |
| Listening | OP | VR129893 | *Listen to an Oral Presentation* | 0.60 | 0.60 | 0.00 |
| Listening | OP | VR129919 | *Listen to a Speaker Support an Opinion* | 0.64 | 0.57 | 0.01 |
| Listening | OP | VR129920 | *Listen to a Speaker Support an Opinion* | 0.73 | 0.56 | 0.01 |
| Listening | OP | VR129921 | *Listen to a Speaker Support an Opinion* | 0.76 | 0.70 | 0.01 |
| Listening | OP | VR129923 | *Listen to a Speaker Support an Opinion* | 0.48 | 0.37 | 0.01 |
| Listening | OP | VR299779 | *Listen to a Classroom Conversation* | 0.72 | 0.60 | 0.00 |
| Listening | OP | VR299780 | *Listen to a Classroom Conversation* | 0.90 | 0.65 | 0.00 |
| Listening | OP | VR299782 | *Listen to a Classroom Conversation* | 0.91 | 0.69 | 0.00 |
| Listening | FT | VR531083 | *Listen to an Oral Presentation* | 0.86 | 0.60 | 0.00 |
| Listening | FT | VR531084 | *Listen to an Oral Presentation* | 0.57 | 0.34 | 0.00 |
| Listening | FT | VR531085 | *Listen to an Oral Presentation* | 0.44 | 0.22 | 0.00 |
| Listening | FT | VR531086 | *Listen to an Oral Presentation* | 0.64 | 0.39 | 0.00 |
| Listening | FT | VR531120 | *Listen to a Short Exchange* | 0.83 | 0.64 | 0.00 |
| Listening | FT | VR531131 | *Listen to a Speaker Support an Opinion* | 0.65 | 0.50 | 0.00 |
| Listening | FT | VR531133 | *Listen to a Speaker Support an Opinion* | 0.53 | 0.43 | 0.00 |
| Listening | FT | VR531134 | *Listen to a Speaker Support an Opinion* | 0.77 | 0.66 | 0.00 |
| Listening | FT | VR531136 | *Listen to a Speaker Support an Opinion* | 0.64 | 0.46 | 0.00 |
| Reading | OP | VH990662 | *Read a Short Informational Passage* | 0.83 | 0.62 | 0.00 |
| Reading | OP | VH990663 | *Read a Short Informational Passage* | 0.43 | 0.50 | 0.00 |
| Reading | OP | VH990664 | *Read a Short Informational Passage* | 0.78 | 0.69 | 0.00 |
| Reading | OP | VH991204 | *Read a Short Informational Passage* | 0.49 | 0.41 | 0.00 |
| Reading | OP | VH991206 | *Read a Short Informational Passage* | 0.72 | 0.78 | 0.00 |
| Reading | OP | VH991207 | *Read a Short Informational Passage* | 0.73 | 0.70 | 0.00 |
| Reading | OP | VR067820 | *Read a Literary Passage* | 0.53 | 0.49 | 0.01 |
| Reading | OP | VR067823 | *Read a Literary Passage* | 0.65 | 0.66 | 0.01 |
| Reading | OP | VR067825 | *Read a Literary Passage* | 0.61 | 0.64 | 0.01 |
| Reading | OP | VR067835 | *Read a Literary Passage* | 0.29 | 0.34 | 0.02 |
| Reading | OP | VR067847 | *Read a Literary Passage* | 0.27 | 0.52 | 0.01 |
| Reading | OP | VR067852 | *Read a Literary Passage* | 0.52 | 0.61 | 0.01 |
| Reading | OP | VR134735 | *Read an Informational Passage* | 0.30 | 0.57 | 0.01 |
| Reading | OP | VR134736 | *Read an Informational Passage* | 0.39 | 0.49 | 0.02 |
| Reading | OP | VR134737 | *Read an Informational Passage* | 0.58 | 0.50 | 0.01 |
| Reading | OP | VR134738 | *Read an Informational Passage* | 0.61 | 0.61 | 0.01 |
| Reading | OP | VR134739 | *Read an Informational Passage* | 0.33 | 0.23 | 0.01 |
| Reading | OP | VR134741 | *Read an Informational Passage* | 0.32 | 0.47 | 0.01 |
| Reading | FT | VR298769 | *Read a Short Informational Passage* | 0.34 | 0.38 | 0.00 |
| Reading | FT | VR298855 | *Read a Short Informational Passage* | 0.69 | 0.52 | 0.00 |
| Reading | FT | VR298863 | *Read a Short Informational Passage* | 0.45 | 0.42 | 0.00 |
| Reading | FT | VR298875 | *Read a Short Informational Passage* | 0.62 | 0.56 | 0.00 |
| Reading | OP | VR299375 | *Read a Student Essay* | 0.60 | 0.53 | 0.01 |
| Reading | OP | VR299520 | *Read a Student Essay* | 0.68 | 0.59 | 0.01 |
| Reading | OP | VR299522 | *Read a Student Essay* | 0.48 | 0.46 | 0.00 |
| Reading | OP | VR299523 | *Read a Student Essay* | 0.62 | 0.50 | 0.00 |
| Reading | OP | VR299538 | *Read a Student Essay* | 0.45 | 0.36 | 0.01 |
| Reading | OP | VR299539 | *Read a Student Essay* | 0.61 | 0.49 | 0.01 |
| Reading | OP | VR299540 | *Read a Student Essay* | 0.39 | 0.54 | 0.01 |
| Reading | OP | VR299541 | *Read a Student Essay* | 0.32 | 0.16 | 0.01 |
| Reading | FT | VR531165 | *Read an Informational Passage* | 0.31 | 0.34 | 0.00 |
| Reading | FT | VR531166 | *Read an Informational Passage* | 0.38 | 0.48 | 0.00 |
| Reading | FT | VR531167 | *Read an Informational Passage* | 0.32 | 0.05 | 0.00 |
| Reading | FT | VR531168 | *Read an Informational Passage* | 0.49 | 0.37 | 0.00 |
| Reading | FT | VR531169 | *Read an Informational Passage* | 0.42 | 0.38 | 0.00 |
| Reading | FT | VR531170 | *Read an Informational Passage* | 0.32 | 0.25 | 0.00 |
| Reading | FT | VR531194 | *Read a Literary Passage* | 0.79 | 0.61 | 0.00 |
| Reading | FT | VR531195 | *Read a Literary Passage* | 0.59 | 0.58 | 0.00 |
| Reading | FT | VR531196 | *Read a Literary Passage* | 0.58 | 0.55 | 0.00 |
| Reading | FT | VR531197 | *Read a Literary Passage* | 0.35 | 0.19 | 0.00 |
| Reading | FT | VR531198 | *Read a Literary Passage* | 0.19 | 0.20 | 0.00 |
| Reading | FT | VR531199 | *Read a Literary Passage* | 0.64 | 0.54 | 0.00 |
| Reading | FT | VR544901 | *Read a Student Essay* | 0.65 | 0.45 | 0.00 |
| Reading | FT | VR544906 | *Read a Student Essay* | 0.78 | 0.70 | 0.00 |
| Reading | FT | VR544907 | *Read a Student Essay* | 0.70 | 0.69 | 0.00 |
| Reading | FT | VR544924 | *Read a Student Essay* | 0.32 | 0.16 | 0.00 |
| Reading | FT | VR544929 | *Read a Student Essay* | 0.37 | 0.19 | 0.00 |
| Reading | FT | VR544932 | *Read a Student Essay* | 0.49 | 0.36 | 0.00 |
| Reading | FT | VR544933 | *Read a Student Essay* | 0.36 | 0.31 | 0.00 |
| Reading | FT | VR544935 | *Read a Student Essay* | 0.41 | 0.46 | 0.00 |

**Note:** In table 8.A.16 through table 8.A.22, “N/A” indicates that the items did not have these score points.

Table 8.A.16 Polytomous Item Statistics—Kindergarten

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Domain** | **OP/FT** | **Item ID** | **Task Type** | ***p*-value** | **Item-Total Correlation** | **Percent Omit Rate** | **% of 0 Points** | **% of 1 Points** | **% of 2 Points** | **% of 3 Points** | **% of 4 Points** |
| Speaking | OP | VR004497 | *Talk about a Scene* | 0.83 | 0.79 | 0.02 | 17.19 | 82.79 | N/A | N/A | N/A |
| Speaking | OP | VR004500 | *Talk about a Scene* | 0.77 | 0.82 | 0.05 | 14.27 | 17.58 | 68.10 | N/A | N/A |
| Speaking | OP | VR004501 | *Talk about a Scene* | 0.77 | 0.84 | 0.03 | 12.79 | 21.14 | 66.04 | N/A | N/A |
| Speaking | OP | VR004502 | *Talk about a Scene* | 0.86 | 0.82 | 0.03 | 14.01 | 85.96 | N/A | N/A | N/A |
| Speaking | OP | VR004937 | *Retell A Narrative* | 0.51 | 0.90 | 0.14 | 20.64 | 14.96 | 22.34 | 24.71 | 17.21 |
| Speaking | OP | VR073102 | *Speaking—Support an Opinion* | 0.86 | 0.77 | 0.25 | 2.56 | 22.49 | 74.71 | N/A | N/A |
| Speaking | OP | VR073110 | *Retell A Narrative* | 0.54 | 0.93 | 0.16 | 16.06 | 14.09 | 25.27 | 27.98 | 16.44 |
| Speaking | OP | VR078508 | *Summarize an Academic Presentation* | 0.43 | 0.92 | 0.25 | 21.46 | 22.07 | 28.58 | 17.81 | 9.84 |
| Speaking | OP | VR129173 | *Speaking—Support an Opinion* | 0.81 | 0.83 | 0.06 | 6.50 | 24.74 | 68.69 | N/A | N/A |
| Speaking | FT | VR531518 | *Talk about a Scene* | 0.85 | 0.80 | 0.04 | 14.93 | 85.03 | N/A | N/A | N/A |
| Speaking | FT | VR531519 | *Talk about a Scene* | 0.81 | 0.74 | 0.04 | 18.55 | 81.41 | N/A | N/A | N/A |
| Speaking | FT | VR531520 | *Talk about a Scene* | 0.74 | 0.78 | 0.04 | 16.85 | 18.77 | 64.35 | N/A | N/A |
| Speaking | FT | VR531523 | *Talk about a Scene* | 0.80 | 0.80 | 0.07 | 14.26 | 10.78 | 74.88 | N/A | N/A |
| Reading | OP | VR002244 | *Read-Along Word with Scaffolding* | 0.64 | 0.76 | 0.00 | 6.35 | 59.76 | 33.89 | N/A | N/A |
| Reading | OP | VR002271 | *Read-Along Word with Scaffolding* | 0.67 | 0.79 | 0.00 | 3.36 | 58.69 | 37.96 | N/A | N/A |
| Reading | FT | VR291323 | *Read-Along Story with Scaffolding* | 0.77 | 0.72 | 0.00 | 14.44 | 17.68 | 67.88 | N/A | N/A |
| Reading | OP | VR291410 | *Read-Along Story with Scaffolding* | 0.71 | 0.73 | 0.00 | 19.09 | 19.69 | 61.23 | N/A | N/A |
| Reading | FT | VR552036 | *Read-Along Word with Scaffolding* | 0.68 | 0.77 | 0.00 | 5.27 | 54.18 | 40.55 | N/A | N/A |
| Reading | FT | VR552045 | *Read-Along Word with Scaffolding* | 0.64 | 0.70 | 0.00 | 9.83 | 52.48 | 37.69 | N/A | N/A |
| Writing | OP | VH574038 | *Write a Story Together with Scaffolding* | 0.63 | 0.83 | 0.00 | 37.42 | 62.58 | N/A | N/A | N/A |
| Writing | OP | VH574059 | *Write a Story Together with Scaffolding* | 0.69 | 0.85 | 0.00 | 31.43 | 68.57 | N/A | N/A | N/A |
| Writing | OP | VH574063 | *Write a Story Together with Scaffolding* | 0.60 | 0.91 | 0.00 | 31.60 | 17.26 | 51.13 | N/A | N/A |
| Writing | OP | VH574079 | *Write a Story Together with Scaffolding* | 0.55 | 0.92 | 0.00 | 35.95 | 18.28 | 45.78 | N/A | N/A |
| Writing | OP | VH590330 | *Label a Picture—Word with Scaffolding* | 0.75 | 0.75 | 0.00 | 25.14 | 74.86 | N/A | N/A | N/A |
| Writing | OP | VH590343 | *Label a Picture—Word with Scaffolding* | 0.83 | 0.75 | 0.00 | 16.73 | 83.27 | N/A | N/A | N/A |
| Writing | OP | VH590348 | *Label a Picture—Word with Scaffolding* | 0.57 | 0.90 | 0.00 | 29.18 | 26.78 | 44.05 | N/A | N/A |
| Writing | OP | VH590354 | *Label a Picture—Word with Scaffolding* | 0.60 | 0.89 | 0.00 | 27.79 | 24.28 | 47.93 | N/A | N/A |
| Writing | FT | VR552469 | *Label a Picture—Word with Scaffolding* | 0.76 | 0.79 | 0.00 | 23.73 | 76.27 | N/A | N/A | N/A |
| Writing | FT | VR552475 | *Label a Picture—Word with Scaffolding* | 0.69 | 0.69 | 0.00 | 31.11 | 68.89 | N/A | N/A | N/A |
| Writing | FT | VR559517 | *Label a Picture—Word with Scaffolding* | 0.59 | 0.88 | 0.00 | 30.48 | 20.05 | 49.47 | N/A | N/A |
| Writing | FT | VR559518 | *Label a Picture—Word with Scaffolding* | 0.49 | 0.82 | 0.00 | 39.37 | 23.18 | 37.44 | N/A | N/A |

Table 8.A.17 Polytomous Item Statistics—Grade One

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Domain** | **OP/FT** | **Item ID** | **Task Type** | ***p*-value** | **Item-Total Correlation** | **Percent Omit Rate** | **% of 0 Points** | **% of 1 Points** | **% of 2 Points** | **% of 3 Points** | **% of 4 Points** |
| Speaking | OP | VR004452 | *Talk about a Scene* | 0.91 | 0.76 | 0.03 | 8.75 | 91.22 | N/A | N/A | N/A |
| Speaking | OP | VR004454 | *Talk about a Scene* | 0.83 | 0.76 | 0.03 | 8.10 | 17.67 | 74.19 | N/A | N/A |
| Speaking | OP | VR004455 | *Talk about a Scene* | 0.86 | 0.80 | 0.03 | 7.99 | 12.61 | 79.38 | N/A | N/A |
| Speaking | OP | VR004456 | *Talk about a Scene* | 0.89 | 0.71 | 0.02 | 11.04 | 88.94 | N/A | N/A | N/A |
| Speaking | OP | VR005326 | *Retell A Narrative* | 0.69 | 0.88 | 0.09 | 7.49 | 7.81 | 18.41 | 33.02 | 33.18 |
| Speaking | OP | VR006358 | *Summarize an Academic Presentation* | 0.41 | 0.86 | 0.20 | 12.73 | 30.89 | 37.40 | 15.01 | 3.78 |
| Speaking | OP | VR007951 | *Speaking—Support an Opinion* | 0.87 | 0.78 | 0.06 | 3.90 | 18.80 | 77.23 | N/A | N/A |
| Speaking | OP | VR007952 | *Speaking—Support an Opinion* | 0.90 | 0.70 | 0.17 | 1.41 | 17.07 | 81.35 | N/A | N/A |
| Speaking | OP | VR142575 | *Summarize an Academic Presentation* | 0.53 | 0.88 | 0.11 | 11.07 | 17.41 | 33.30 | 25.62 | 12.50 |
| Speaking | FT | VR142602 | *Summarize an Academic Presentation* | 0.49 | 0.83 | 0.19 | 11.11 | 18.73 | 41.26 | 19.10 | 9.61 |
| Speaking | FT | VR291699 | *Speaking—Support an Opinion* | 0.87 | 0.74 | 0.00 | 4.01 | 17.76 | 78.23 | N/A | N/A |
| Speaking | FT | VR291714 | *Speaking—Support an Opinion* | 0.89 | 0.65 | 0.12 | 1.37 | 18.15 | 80.35 | N/A | N/A |
| Speaking | FT | VR295971 | *Retell A Narrative* | 0.60 | 0.85 | 0.00 | 10.67 | 10.80 | 24.59 | 34.08 | 19.85 |
| Writing | OP | VH575342 | *Write a Story Together with Scaffolding* | 0.93 | 0.72 | 0.00 | 7.39 | 92.61 | N/A | N/A | N/A |
| Writing | OP | VH575352 | *Write a Story Together with Scaffolding* | 0.74 | 0.77 | 0.00 | 19.19 | 13.36 | 67.45 | N/A | N/A |
| Writing | OP | VH575358 | *Write a Story Together with Scaffolding* | 0.49 | 0.84 | 0.00 | 30.00 | 18.48 | 25.90 | 25.62 | N/A |
| Writing | OP | VH581453 | *Describe a Picture* | 0.46 | 0.91 | 0.00 | 29.25 | 22.42 | 30.27 | 18.05 | N/A |
| Writing | OP | VR291725 | *Write About an Experience* | 0.44 | 0.89 | 0.00 | 31.18 | 21.68 | 30.87 | 16.27 | N/A |
| Writing | OP | VR291785 | *Write an Informational Text Together* | 0.52 | 0.86 | 0.00 | 24.63 | 46.52 | 28.86 | N/A | N/A |
| Writing | OP | VR291792 | *Write an Informational Text Together* | 0.52 | 0.87 | 0.00 | 26.31 | 18.63 | 27.54 | 27.51 | N/A |
| Writing | FT | VR531743 | *Write an Informational Text Together* | 0.55 | 0.82 | 0.00 | 26.30 | 37.54 | 36.17 | N/A | N/A |
| Writing | FT | VR531744 | *Write an Informational Text Together* | 0.51 | 0.80 | 0.00 | 29.08 | 16.23 | 26.83 | 27.86 | N/A |
| Writing | FT | VR531769 | *Describe a Picture* | 0.47 | 0.85 | 0.00 | 30.79 | 19.65 | 27.17 | 22.39 | N/A |

Table 8.A.18 Polytomous Item Statistics—Grade Two

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Domain** | **OP/FT** | **Item ID** | **Task Type** | ***p*-value** | **Item-Total Correlation** | **Percent Omit Rate** | **% of 0 Points** | **% of 1 Points** | **% of 2 Points** | **% of 3 Points** | **% of 4 Points** |
| Speaking | OP | VR004308 | *Talk about a Scene* | 0.91 | 0.77 | 0.02 | 4.83 | 8.99 | 86.16 | N/A | N/A |
| Speaking | OP | VR004309 | *Talk about a Scene* | 0.92 | 0.74 | 0.03 | 4.95 | 5.72 | 89.30 | N/A | N/A |
| Speaking | OP | VR004310 | *Talk about a Scene* | 0.94 | 0.68 | 0.02 | 5.98 | 94.01 | N/A | N/A | N/A |
| Speaking | OP | VR004312 | *Talk about a Scene* | 0.96 | 0.62 | 0.02 | 3.87 | 96.11 | N/A | N/A | N/A |
| Speaking | OP | VR005418 | *Retell A Narrative* | 0.79 | 0.82 | 0.08 | 4.57 | 3.51 | 11.56 | 31.09 | 49.20 |
| Speaking | OP | VR006049 | *Summarize an Academic Presentation* | 0.57 | 0.85 | 0.17 | 6.48 | 16.80 | 32.59 | 29.67 | 14.28 |
| Speaking | OP | VR076823 | *Speech Functions* | 0.77 | 0.69 | 0.06 | 9.95 | 26.70 | 63.28 | N/A | N/A |
| Speaking | OP | VR077209 | *Speaking—Support an Opinion* | 0.95 | 0.67 | 0.07 | 0.76 | 8.84 | 90.32 | N/A | N/A |
| Speaking | OP | VR127392 | *Speaking—Support an Opinion* | 0.89 | 0.67 | 0.06 | 1.14 | 19.65 | 79.15 | N/A | N/A |
| Speaking | OP | VR127442 | *Speech Functions* | 0.80 | 0.69 | 0.05 | 10.79 | 18.26 | 70.90 | N/A | N/A |
| Speaking | OP | VR141350 | *Summarize an Academic Presentation* | 0.56 | 0.85 | 0.11 | 9.56 | 14.13 | 33.69 | 29.43 | 13.08 |
| Speaking | OP | VR292485 | *Speech Functions* | 0.85 | 0.64 | 0.12 | 8.20 | 14.06 | 77.62 | N/A | N/A |
| Speaking | FT | VR530624 | *Summarize an Academic Presentation* | 0.58 | 0.78 | 0.12 | 5.91 | 14.90 | 33.74 | 30.20 | 15.13 |
| Speaking | FT | VR530674 | *Speaking—Support an Opinion* | 0.95 | 0.60 | 0.00 | 0.58 | 7.94 | 91.48 | N/A | N/A |
| Speaking | FT | VR530678 | *Talk about a Scene* | 0.93 | 0.70 | 0.00 | 7.36 | 92.64 | N/A | N/A | N/A |
| Speaking | FT | VR530679 | *Talk about a Scene* | 0.96 | 0.59 | 0.00 | 4.44 | 95.56 | N/A | N/A | N/A |
| Speaking | FT | VR530681 | *Talk about a Scene* | 0.87 | 0.59 | 0.00 | 7.69 | 11.57 | 80.74 | N/A | N/A |
| Speaking | FT | VR530682 | *Talk about a Scene* | 0.87 | 0.68 | 0.00 | 4.60 | 17.24 | 78.16 | N/A | N/A |
| Writing | OP | VH573930 | *Write a Story Together with Scaffolding* | 0.60 | 0.81 | 0.00 | 11.77 | 56.48 | 31.75 | N/A | N/A |
| Writing | OP | VH573933 | *Write a Story Together with Scaffolding* | 0.63 | 0.83 | 0.00 | 15.97 | 16.75 | 28.25 | 39.04 | N/A |
| Writing | OP | VH581436 | *Describe a Picture* | 0.67 | 0.91 | 0.00 | 14.41 | 13.85 | 29.29 | 42.46 | N/A |
| Writing | OP | VH581499 | *Write an Informational Text Together* | 0.59 | 0.87 | 0.00 | 14.47 | 53.59 | 31.94 | N/A | N/A |
| Writing | OP | VH581501 | *Write an Informational Text Together* | 0.60 | 0.87 | 0.00 | 16.89 | 19.07 | 31.76 | 32.28 | N/A |
| Writing | OP | VR287087 | *Write About an Experience* | 0.54 | 0.90 | 0.00 | 15.43 | 14.57 | 26.82 | 26.55 | 16.62 |
| Writing | FT | VR546388 | *Describe a Picture* | 0.63 | 0.85 | 0.00 | 16.67 | 13.75 | 33.21 | 36.37 | N/A |
| Writing | FT | VR546393 | *Write an Informational Text Together* | 0.56 | 0.86 | 0.00 | 18.02 | 51.28 | 30.70 | N/A | N/A |
| Writing | FT | VR546396 | *Write an Informational Text Together* | 0.60 | 0.76 | 0.00 | 20.07 | 15.47 | 28.52 | 35.95 | N/A |

Table 8.A.19 Polytomous Item Statistics—Grade Span Three Through Five

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Domain** | **OP/FT** | **Item ID** | **Task Type** | ***p*-value** | **Item-Total Correlation** | **Percent Omit Rate** | **% of 0 Points** | **% of 1 Points** | **% of 2 Points** | **% of 3 Points** | **% of 4 Points** |
| Speaking | OP | VR004081 | *Talk about a Scene* | 0.93 | 0.65 | 0.03 | 6.60 | 93.38 | N/A | N/A | N/A |
| Speaking | OP | VR004083 | *Talk about a Scene* | 0.78 | 0.74 | 0.02 | 11.56 | 20.31 | 68.11 | N/A | N/A |
| Speaking | OP | VR004084 | *Talk about a Scene* | 0.94 | 0.70 | 0.03 | 4.00 | 4.08 | 91.89 | N/A | N/A |
| Speaking | OP | VR004085 | *Talk about a Scene* | 0.92 | 0.69 | 0.02 | 7.62 | 92.35 | N/A | N/A | N/A |
| Speaking | OP | VR005900 | *Speech Functions* | 0.78 | 0.68 | 0.16 | 8.32 | 27.33 | 64.18 | N/A | N/A |
| Speaking | OP | VR006531 | *Summarize an Academic Presentation* | 0.68 | 0.82 | 0.11 | 2.16 | 7.73 | 28.49 | 38.13 | 23.39 |
| Speaking | OP | VR072829 | *Speech Functions* | 0.87 | 0.63 | 0.07 | 4.38 | 17.14 | 78.41 | N/A | N/A |
| Speaking | OP | VR128590 | *Speaking—Support an Opinion* | 0.82 | 0.77 | 0.05 | 2.10 | 8.80 | 30.95 | 58.11 | N/A |
| Speaking | OP | VR128614 | *Speaking—Support an Opinion* | 0.84 | 0.74 | 0.05 | 0.75 | 6.83 | 32.66 | 59.71 | N/A |
| Speaking | OP | VR141077 | *Speech Functions* | 0.80 | 0.78 | 0.04 | 8.92 | 22.60 | 68.44 | N/A | N/A |
| Speaking | OP | VR141148 | *Summarize an Academic Presentation* | 0.69 | 0.84 | 0.07 | 2.77 | 6.18 | 25.75 | 40.82 | 24.41 |
| Speaking | OP | VR298046 | *Retell A Narrative* | 0.80 | 0.79 | 0.06 | 1.90 | 2.04 | 10.33 | 44.37 | 41.30 |
| Speaking | FT | VR530951 | *Speech Functions* | 0.74 | 0.53 | 0.05 | 9.90 | 32.91 | 57.14 | N/A | N/A |
| Speaking | FT | VR530962 | *Talk about a Scene* | 0.94 | 0.74 | 0.05 | 6.13 | 93.82 | N/A | N/A | N/A |
| Speaking | FT | VR530963 | *Talk about a Scene* | 0.92 | 0.72 | 0.03 | 5.64 | 5.51 | 88.82 | N/A | N/A |
| Speaking | FT | VR530965 | *Talk about a Scene* | 0.89 | 0.70 | 0.05 | 5.18 | 10.74 | 84.03 | N/A | N/A |
| Speaking | FT | VR531036 | *Summarize an Academic Presentation* | 0.72 | 0.78 | 0.02 | 2.78 | 4.67 | 22.47 | 41.12 | 28.94 |
| Speaking | FT | VR552046 | *Talk about a Scene* | 0.95 | 0.65 | 0.07 | 4.53 | 95.40 | N/A | N/A | N/A |
| Writing | OP | VR026361 | *Describe a Picture* | 0.69 | 0.77 | 1.61 | 10.25 | 37.31 | 50.82 | N/A | N/A |
| Writing | OP | VR026363 | *Describe a Picture* | 0.72 | 0.77 | 0.79 | 11.83 | 29.82 | 57.56 | N/A | N/A |
| Writing | OP | VR029495 | *Write About an Experience* | 0.54 | 0.89 | 1.16 | 6.82 | 16.34 | 33.39 | 36.14 | 6.16 |
| Writing | OP | VR029800 | *Writing—Justify an Opinion* | 0.50 | 0.89 | 1.64 | 6.67 | 21.28 | 38.32 | 27.60 | 4.49 |
| Writing | OP | VR297910 | *Write About Academic Information* | 0.60 | 0.76 | 2.00 | 14.86 | 46.20 | 36.93 | N/A | N/A |
| Writing | OP | VR297914 | *Write About Academic Information* | 0.60 | 0.84 | 3.27 | 9.84 | 22.61 | 34.91 | 29.37 | N/A |
| Writing | FT | VR554750 | *Writing—Justify an Opinion* | 0.44 | 0.80 | 2.95 | 16.42 | 20.29 | 34.32 | 18.03 | 7.99 |
| Writing | FT | VR554796 | *Describe a Picture* | 0.51 | 0.66 | 1.27 | 24.23 | 46.25 | 28.26 | N/A | N/A |
| Writing | FT | VR554808 | *Describe a Picture* | 0.67 | 0.69 | 2.49 | 14.51 | 31.91 | 51.09 | N/A | N/A |

Table 8.A.20 Polytomous Item Statistics—Grade Span Six Through Eight

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Domain** | **OP/FT** | **Item ID** | **Task Type** | ***p*-value** | **Item-Total Correlation** | **Percent Omit Rate** | **% of 0 Points** | **% of 1 Points** | **% of 2 Points** | **% of 3 Points** | **% of 4 Points** |
| Speaking | OP | VR005162 | *Speaking—Support an Opinion* | 0.81 | 0.81 | 0.10 | 3.97 | 8.17 | 29.04 | 58.72 | N/A |
| Speaking | OP | VR005177 | *Speaking—Support an Opinion* | 0.83 | 0.82 | 0.06 | 3.93 | 7.35 | 23.80 | 64.85 | N/A |
| Speaking | OP | VR011109 | *Summarize an Academic Presentation* | 0.76 | 0.86 | 0.15 | 2.85 | 4.79 | 16.27 | 38.71 | 37.24 |
| Speaking | FT | VR072846 | *Speech Functions* | 0.88 | 0.70 | 0.04 | 7.03 | 9.66 | 83.27 | N/A | N/A |
| Speaking | FT | VR072854 | *Speech Functions* | 0.90 | 0.62 | 0.14 | 4.95 | 8.89 | 86.02 | N/A | N/A |
| Speaking | OP | VR127717 | *Speech Functions* | 0.90 | 0.74 | 0.05 | 6.02 | 7.95 | 85.99 | N/A | N/A |
| Speaking | OP | VR127722 | *Speech Functions* | 0.90 | 0.66 | 0.12 | 2.94 | 13.10 | 83.85 | N/A | N/A |
| Speaking | OP | VR127904 | *Present and Discuss Information* | 0.74 | 0.83 | 0.09 | 6.34 | 14.31 | 31.02 | 48.23 | N/A |
| Speaking | OP | VR127905 | *Present and Discuss Information* | 0.68 | 0.80 | 0.11 | 9.60 | 19.51 | 27.31 | 43.47 | N/A |
| Speaking | FT | VR128150 | *Speaking—Support an Opinion* | 0.77 | 0.78 | 0.12 | 6.11 | 10.32 | 28.80 | 54.64 | N/A |
| Speaking | FT | VR128171 | *Speaking—Support an Opinion* | 0.79 | 0.78 | 0.12 | 5.97 | 9.26 | 27.11 | 57.54 | N/A |
| Speaking | FT | VR140940 | *Summarize an Academic Presentation* | 0.70 | 0.81 | 0.20 | 4.93 | 6.83 | 19.86 | 40.12 | 28.06 |
| Speaking | OP | VR141062 | *Summarize an Academic Presentation* | 0.66 | 0.86 | 0.11 | 4.03 | 9.06 | 29.55 | 34.83 | 22.42 |
| Speaking | OP | VR289402 | *Talk about a Scene* | 0.95 | 0.71 | 0.03 | 5.30 | 94.67 | N/A | N/A | N/A |
| Speaking | OP | VR292111 | *Talk about a Scene* | 0.95 | 0.58 | 0.02 | 5.13 | 94.86 | N/A | N/A | N/A |
| Speaking | OP | VR292114 | *Talk about a Scene* | 0.94 | 0.72 | 0.02 | 3.87 | 5.06 | 91.05 | N/A | N/A |
| Speaking | OP | VR297220 | *Talk about a Scene* | 0.94 | 0.71 | 0.03 | 4.15 | 3.94 | 91.89 | N/A | N/A |
| Speaking | FT | VR531825 | *Speaking—Support an Opinion* | 0.83 | 0.76 | 0.14 | 4.07 | 7.81 | 24.21 | 63.77 | N/A |
| Writing | OP | VR026221 | *Describe a Picture* | 0.80 | 0.69 | 0.68 | 6.55 | 26.03 | 66.73 | N/A | N/A |
| Writing | OP | VR026223 | *Describe a Picture* | 0.70 | 0.73 | 0.39 | 10.09 | 38.38 | 51.14 | N/A | N/A |
| Writing | OP | VR028567 | *Write About Academic Information* | 0.66 | 0.83 | 2.00 | 7.60 | 16.68 | 38.55 | 35.17 | N/A |
| Writing | OP | VR028568 | *Write About Academic Information* | 0.74 | 0.74 | 0.84 | 7.71 | 35.17 | 56.28 | N/A | N/A |
| Writing | OP | VR029169 | *Write About an Experience* | 0.63 | 0.87 | 0.88 | 5.78 | 7.96 | 23.77 | 51.51 | 10.10 |
| Writing | OP | VR029526 | *Writing—Justify an Opinion* | 0.56 | 0.89 | 1.20 | 5.45 | 16.04 | 31.58 | 38.45 | 7.26 |
| Writing | FT | VR554660 | *Write About Academic Information* | 0.58 | 0.59 | 1.96 | 14.74 | 51.49 | 31.80 | N/A | N/A |
| Writing | FT | VR554711 | *Write About Academic Information* | 0.52 | 0.69 | 2.38 | 9.95 | 32.83 | 41.99 | 12.85 | N/A |
| Writing | FT | VR554824 | *Writing—Justify an Opinion* | 0.53 | 0.80 | 2.65 | 8.81 | 16.06 | 32.78 | 27.24 | 12.47 |

Table 8.A.21 Polytomous Item Statistics—Grade Span Nine and Ten

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Domain** | **OP/FT** | **Item ID** | **Task Type** | ***p*-value** | **Item-Total Correlation** | **Percent Omit Rate** | **% of 0 Points** | **% of 1 Points** | **% of 2 Points** | **% of 3 Points** | **% of 4 Points** |
| Speaking | OP | VR004040 | *Talk about a Scene* | 0.91 | 0.78 | 0.03 | 9.43 | 90.53 | N/A | N/A | N/A |
| Speaking | OP | VR004042 | *Talk about a Scene* | 0.86 | 0.76 | 0.04 | 9.48 | 9.83 | 80.65 | N/A | N/A |
| Speaking | OP | VR004043 | *Talk about a Scene* | 0.87 | 0.83 | 0.04 | 9.02 | 7.92 | 83.02 | N/A | N/A |
| Speaking | OP | VR004044 | *Talk about a Scene* | 0.91 | 0.70 | 0.04 | 9.39 | 90.57 | N/A | N/A | N/A |
| Speaking | FT | VR005868 | *Present and Discuss Information* | 0.79 | 0.73 | 0.64 | 7.66 | 8.90 | 21.46 | 61.33 | N/A |
| Speaking | FT | VR005869 | *Present and Discuss Information* | 0.73 | 0.72 | 0.60 | 7.23 | 10.43 | 35.18 | 46.56 | N/A |
| Speaking | OP | VR010463 | *Summarize an Academic Presentation* | 0.71 | 0.88 | 0.19 | 4.43 | 5.94 | 19.80 | 38.18 | 31.47 |
| Speaking | OP | VR073795 | *Speaking—Support an Opinion* | 0.86 | 0.81 | 0.14 | 3.15 | 5.72 | 20.08 | 70.91 | N/A |
| Speaking | OP | VR073797 | *Present and Discuss Information* | 0.83 | 0.75 | 0.14 | 4.69 | 6.68 | 23.26 | 65.22 | N/A |
| Speaking | OP | VR073798 | *Present and Discuss Information* | 0.84 | 0.76 | 0.15 | 6.17 | 7.92 | 13.73 | 72.03 | N/A |
| Speaking | OP | VR073807 | *Speech Functions* | 0.85 | 0.83 | 0.08 | 10.69 | 7.97 | 81.26 | N/A | N/A |
| Speaking | OP | VR073813 | *Speech Functions* | 0.89 | 0.69 | 0.26 | 5.24 | 10.55 | 83.95 | N/A | N/A |
| Speaking | OP | VR073815 | *Speaking—Support an Opinion* | 0.84 | 0.82 | 0.11 | 4.49 | 6.31 | 20.88 | 68.21 | N/A |
| Speaking | OP | VR203704 | *Summarize an Academic Presentation* | 0.71 | 0.87 | 0.28 | 4.39 | 6.93 | 20.47 | 37.50 | 30.44 |
| Speaking | FT | VR292869 | *Summarize an Academic Presentation* | 0.63 | 0.78 | 1.31 | 7.52 | 9.44 | 24.05 | 36.22 | 21.46 |
| Speaking | FT | VR530264 | *Summarize an Academic Presentation* | 0.66 | 0.77 | 1.17 | 5.29 | 6.53 | 24.90 | 39.27 | 22.84 |
| Speaking | FT | VR544904 | *Present and Discuss Information* | 0.84 | 0.71 | 0.89 | 3.23 | 5.64 | 24.51 | 65.73 | N/A |
| Speaking | FT | VR544928 | *Present and Discuss Information* | 0.82 | 0.71 | 0.89 | 4.90 | 8.94 | 19.47 | 65.80 | N/A |
| Writing | OP | VR023983 | *Describe a Picture* | 0.69 | 0.74 | 0.62 | 10.78 | 38.24 | 50.37 | N/A | N/A |
| Writing | OP | VR023986 | *Describe a Picture* | 0.75 | 0.71 | 1.04 | 7.02 | 34.42 | 57.53 | N/A | N/A |
| Writing | OP | VR029230 | *Write About an Experience* | 0.65 | 0.88 | 1.38 | 7.59 | 7.61 | 23.02 | 36.21 | 24.20 |
| Writing | FT | VR029709 | *Writing—Justify an Opinion* | 0.58 | 0.81 | 3.30 | 7.71 | 12.15 | 26.71 | 33.00 | 17.13 |
| Writing | OP | VR029711 | *Writing—Justify an Opinion* | 0.58 | 0.90 | 1.76 | 7.44 | 12.57 | 26.26 | 41.67 | 10.31 |
| Writing | OP | VR129251 | *Write About Academic Information* | 0.63 | 0.86 | 2.97 | 8.82 | 17.68 | 39.25 | 31.28 | N/A |
| Writing | OP | VR129252 | *Write About Academic Information* | 0.65 | 0.74 | 1.73 | 8.67 | 48.42 | 41.18 | N/A | N/A |
| Writing | FT | VR528964 | *Describe a Picture* | 0.49 | 0.51 | 0.64 | 20.96 | 58.07 | 20.32 | N/A | N/A |
| Writing | FT | VR528967 | *Describe a Picture* | 0.73 | 0.57 | 1.28 | 7.27 | 36.36 | 55.09 | N/A | N/A |

Table 8.A.22 Polytomous Item Statistics—Grade Span Eleven and Twelve

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Domain** | **OP/FT** | **Item ID** | **Task Type** | ***p*-value** | **Item-Total Correlation** | **Percent Omit Rate** | **% of 0 Points** | **% of 1 Points** | **% of 2 Points** | **% of 3 Points** | **% of 4 Points** |
| Speaking | OP | VR004479 | *Talk about a Scene* | 0.93 | 0.78 | 0.02 | 6.72 | 93.26 | N/A | N/A | N/A |
| Speaking | OP | VR004481 | *Talk about a Scene* | 0.91 | 0.79 | 0.03 | 6.74 | 5.20 | 88.04 | N/A | N/A |
| Speaking | OP | VR004482 | *Talk about a Scene* | 0.88 | 0.77 | 0.04 | 6.36 | 10.58 | 83.01 | N/A | N/A |
| Speaking | OP | VR004483 | *Talk about a Scene* | 0.94 | 0.75 | 0.05 | 5.61 | 94.34 | N/A | N/A | N/A |
| Speaking | FT | VR011365 | *Speech Functions* | 0.84 | 0.62 | 0.80 | 6.70 | 16.86 | 75.64 | N/A | N/A |
| Speaking | OP | VR011367 | *Speech Functions* | 0.82 | 0.76 | 0.08 | 9.29 | 17.91 | 72.72 | N/A | N/A |
| Speaking | OP | VR011369 | *Speech Functions* | 0.76 | 0.74 | 0.19 | 9.84 | 28.46 | 61.51 | N/A | N/A |
| Speaking | OP | VR012339 | *Summarize an Academic Presentation* | 0.67 | 0.90 | 0.31 | 4.58 | 7.53 | 25.71 | 37.85 | 24.01 |
| Speaking | OP | VR073817 | *Present and Discuss Information* | 0.85 | 0.77 | 0.22 | 3.10 | 6.36 | 21.28 | 69.04 | N/A |
| Speaking | OP | VR073818 | *Present and Discuss Information* | 0.86 | 0.76 | 0.24 | 4.82 | 7.33 | 13.01 | 74.60 | N/A |
| Speaking | OP | VR074652 | *Speaking—Support an Opinion* | 0.82 | 0.83 | 0.18 | 4.40 | 7.80 | 24.24 | 63.38 | N/A |
| Speaking | FT | VR128799 | *Present and Discuss Information* | 0.77 | 0.71 | 2.03 | 6.24 | 10.01 | 24.33 | 57.39 | N/A |
| Speaking | FT | VR128800 | *Present and Discuss Information* | 0.71 | 0.68 | 2.03 | 8.17 | 16.72 | 22.63 | 50.45 | N/A |
| Speaking | OP | VR141723 | *Speaking—Support an Opinion* | 0.82 | 0.84 | 0.17 | 4.92 | 7.96 | 23.63 | 63.32 | N/A |
| Speaking | OP | VR142013 | *Summarize an Academic Presentation* | 0.75 | 0.84 | 0.38 | 4.15 | 5.01 | 15.94 | 35.34 | 39.18 |
| Speaking | FT | VR289410 | *Speech Functions* | 0.81 | 0.71 | 0.75 | 10.99 | 14.76 | 73.50 | N/A | N/A |
| Speaking | FT | VR299279 | *Summarize an Academic Presentation* | 0.64 | 0.72 | 3.21 | 6.66 | 6.90 | 24.99 | 32.83 | 25.41 |
| Speaking | FT | VR545405 | *Summarize an Academic Presentation* | 0.69 | 0.72 | 2.46 | 6.75 | 9.40 | N/A | 58.81 | 22.58 |
| Writing | OP | VR025976 | *Describe a Picture* | 0.71 | 0.76 | 0.47 | 10.62 | 35.43 | 53.49 | N/A | N/A |
| Writing | OP | VR025979 | *Describe a Picture* | 0.76 | 0.71 | 0.78 | 5.86 | 34.04 | 59.31 | N/A | N/A |
| Writing | OP | VR029667 | *Writing—Justify an Opinion* | 0.57 | 0.86 | 1.58 | 5.89 | 14.69 | 28.43 | 42.23 | 7.17 |
| Writing | OP | VR072917 | *Write About Academic Information* | 0.69 | 0.85 | 2.13 | 6.37 | 12.81 | 42.60 | 36.09 | N/A |
| Writing | OP | VR072918 | *Write About Academic Information* | 0.82 | 0.79 | 1.12 | 7.12 | 18.90 | 72.86 | N/A | N/A |
| Writing | OP | VR289505 | *Write About an Experience* | 0.65 | 0.88 | 1.47 | 6.97 | 7.58 | 24.31 | 35.74 | 23.92 |
| Writing | FT | VR545606 | *Describe a Picture* | 0.71 | 0.62 | 0.69 | 9.00 | 38.42 | 51.89 | N/A | N/A |
| Writing | FT | VR545610 | *Describe a Picture* | 0.75 | 0.61 | 1.44 | 7.32 | 33.04 | 58.20 | N/A | N/A |
| Writing | FT | VR545616 | *Writing—Justify an Opinion* | 0.57 | 0.83 | 3.14 | 10.13 | 10.47 | 26.92 | 32.25 | 17.08 |

### Appendix 8.B: Differential Item Functioning Results for the Summative ELPAC

The following abbreviations apply to table 8.B.1 and table 8.B.2:

* “IN” = Insufficient N
* “N/A” = Not Applicable

Table 8.B.1 Gender DIF Classifications Summary by Grade Level or Grade Span

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Domain** | **DIF Category** | **Kindergarten Number** | **Kindergarten Percent** | **Grade 1 Number** | **Grade 1 Percent** | **Grade 2 Number** | **Grade 2 Percent** | **Grade Span 3–5 Number** | **Grade Span 3–5 Percent** | **Grade Span 6–8 Number** | **Grade Span 6–8 Percent** | **Grade Span 9–10 Number** | **Grade Span 9–10 Percent** | **Grade Span 11–12 Number** | **Grade Span 11–12 Percent** |
| Listening | C− | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Listening | B− | 0 | 0.00 | 0 | 0.00 | 1 | 9.09 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Listening | A | 10 | 100.00 | 9 | 81.82 | 10 | 90.91 | 11 | 100.00 | 8 | 100.00 | 11 | 100.00 | 11 | 100.00 |
| Listening | B+ | 0 | 0.00 | 2 | 18.18 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Listening | C+ | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Listening | IN | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| **Total Listening:** | **N/A** | **10** | **100.00** | **11** | **100.00** | **11** | **100.00** | **11** | **100.00** | **8** | **100.00** | **11** | **100.00** | **11** | **100.00** |
| Speaking | C− | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Speaking | B− | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Speaking | A | 4 | 100.00 | 4 | 100.00 | 6 | 100.00 | 6 | 100.00 | 6 | 100.00 | 6 | 100.00 | 6 | 100.00 |
| Speaking | B+ | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Speaking | C+ | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Speaking | IN | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| **Total Speaking:** | **N/A** | **4** | **100.00** | **4** | **100.00** | **6** | **100.00** | **6** | **100.00** | **6** | **100.00** | **6** | **100.00** | **6** | **100.00** |
| Reading | C− | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Reading | B− | 1 | 7.14 | 1 | 4.76 | 0 | 0.00 | 0 | 0.00 | 1 | 5.88 | 1 | 4.35 | 0 | 0.00 |
| Reading | A | 13 | 92.86 | 20 | 95.24 | 26 | 100.00 | 17 | 100.00 | 15 | 88.24 | 22 | 95.65 | 22 | 91.67 |
| Reading | B+ | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 1 | 5.88 | 0 | 0.00 | 2 | 8.33 |
| Reading | C+ | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Reading | IN | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| **Total Reading:** | **N/A** | **14** | **100.00** | **21** | **100.00** | **26** | **100.00** | **17** | **100.00** | **17** | **100.00** | **23** | **100.00** | **24** | **100.00** |
| Writing | C− | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Writing | B− | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Writing | A | 4 | 100.00 | 3 | 100.00 | 3 | 100.00 | 3 | 100.00 | 3 | 100.00 | 3 | 100.00 | 3 | 100.00 |
| Writing | B+ | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Writing | C+ | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Writing | IN | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| **Total Writing:** | **N/A** | **4** | **100.00** | **3** | **100.00** | **3** | **100.00** | **3** | **100.00** | **3** | **100.00** | **3** | **100.00** | **3** | **100.00** |

Table 8.B.2 Hispanic or Latino or Non-Hispanic or Non-Latino DIF Classifications Summary by Grade Level or Grade Span

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Domain** | **DIF Category** | **Kindergarten Number** | **Kindergarten Percent** | **Grade 1 Number** | **Grade 1 Percent** | **Grade 2 Number** | **Grade 2 Percent** | **Grade Span 3–5 Number** | **Grade Span 3–5 Percent** | **Grade Span 6–8 Number** | **Grade Span 6–8 Percent** | **Grade Span 9–10 Number** | **Grade Span 9–10 Percent** | **Grade Span 11–12 Number** | **Grade Span 11–12 Percent** |
| Listening | C− | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Listening | B− | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 1 | 12.50 | 0 | 0.00 | 0 | 0.00 |
| Listening | A | 10 | 100.00 | 11 | 100.00 | 10 | 90.91 | 11 | 100.00 | 6 | 75.00 | 10 | 90.91 | 11 | 100.00 |
| Listening | B+ | 0 | 0.00 | 0 | 0.00 | 1 | 9.09 | 0 | 0.00 | 1 | 12.50 | 1 | 9.09 | 0 | 0.00 |
| Listening | C+ | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Listening | IN | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| **Total Listening:** | **N/A** | **10** | **100.00** | **11** | **100.00** | **11** | **100.00** | **11** | **100.00** | **8** | **100.00** | **11** | **100.00** | **11** | **100.00** |
| Speaking | C− | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Speaking | B− | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Speaking | A | 4 | 100.00 | 4 | 100.00 | 6 | 100.00 | 6 | 100.00 | 6 | 100.00 | 6 | 100.00 | 6 | 100.00 |
| Speaking | B+ | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Speaking | C+ | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Speaking | IN | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| **Total Speaking:** | **N/A** | **4** | **100.00** | **4** | **100.00** | **6** | **100.00** | **6** | **100.00** | **6** | **100.00** | **6** | **100.00** | **6** | **100.00** |
| Reading | C− | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Reading | B− | 0 | 0.00 | 2 | 9.52 | 0 | 0.00 | 0 | 0.00 | 1 | 5.88 | 4 | 17.39 | 1 | 4.17 |
| Reading | A | 11 | 78.57 | 18 | 85.71 | 26 | 100.00 | 17 | 100.00 | 15 | 88.24 | 17 | 73.91 | 22 | 91.67 |
| Reading | B+ | 3 | 21.43 | 1 | 4.76 | 0 | 0.00 | 0 | 0.00 | 1 | 5.88 | 2 | 8.70 | 1 | 4.17 |
| Reading | C+ | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Reading | IN | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| **Total Reading:** | **N/A** | **14** | **100.00** | **21** | **100.00** | **26** | **100.00** | **17** | **100.00** | **17** | **100.00** | **23** | **100.00** | **24** | **100.00** |
| Writing | C− | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Writing | B− | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 1 | 33.33 |
| Writing | A | 3 | 75.00 | 3 | 100.00 | 3 | 100.00 | 3 | 100.00 | 3 | 100.00 | 3 | 100.00 | 2 | 66.67 |
| Writing | B+ | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Writing | C+ | 1 | 25.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Writing | IN | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| **Total Writing:** | **N/A** | **4** | **100.00** | **3** | **100.00** | **3** | **100.00** | **3** | **100.00** | **3** | **100.00** | **3** | **100.00** | **3** | **100.00** |

Table 8.B.3 Items Exhibiting Significant DIF by Student Group

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Domain** | **Grade Level or Grade Span** | **Item ID** | **N Focal** | **N Reference** | **MH-DIF** | **SMD** | **Comparison** | **In Favor Of** |
| Writing | Kindergarten | VR552475 | 651 | 2,621 | 1.73 | N/A | Hispanic–Non-Hispanic | Non-Hispanic |

**Notes:**

* “N/A” indicates that this statistic was not available for the item.
* DIF comparisons are not performed using the nonbinary group because sample sizes are insufficient to make those comparisons meaningful.

### Appendix 8.C: Item Response Theory Results for the Summative ELPAC

**Notes:**

* In table 8.C.1 through table 8.C.14, “N/A” indicates that these items were either MC and did not have *d*-parameter estimates or were CR items worth less than four points.
* “OP” indicates operational items and “FT” indicates field test items.

Table 8.C.1 IRT Item Statistics—Oral Language, Kindergarten

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Item ID** | **Item Type** | **Item Difficulty b** | **Item Discrimination a** | **D1** | **D2** | **D3** | **D4** |
| VR012659 | OP | −2.66 | 0.48 | N/A | N/A | N/A | N/A |
| VR012699 | OP | −3.21 | 0.65 | N/A | N/A | N/A | N/A |
| VR021577 | OP | −2.69 | 0.73 | N/A | N/A | N/A | N/A |
| VR025402 | OP | −2.92 | 0.90 | N/A | N/A | N/A | N/A |
| VR025403 | OP | −3.25 | 0.71 | N/A | N/A | N/A | N/A |
| VR025404 | OP | −1.44 | 0.37 | N/A | N/A | N/A | N/A |
| VR025544 | OP | −3.80 | 0.68 | N/A | N/A | N/A | N/A |
| VR025545 | OP | −2.10 | 0.50 | N/A | N/A | N/A | N/A |
| VR025546 | OP | −2.78 | 0.56 | N/A | N/A | N/A | N/A |
| VR027125 | OP | −0.61 | 0.45 | N/A | N/A | N/A | N/A |
| VR027126 | OP | −1.81 | 0.40 | N/A | N/A | N/A | N/A |
| VR027127 | OP | −4.21 | 0.65 | N/A | N/A | N/A | N/A |
| VR058901 | OP | −1.88 | 0.62 | N/A | N/A | N/A | N/A |
| VR058909 | OP | −0.41 | 0.38 | N/A | N/A | N/A | N/A |
| VR059595 | OP | −3.73 | 0.58 | N/A | N/A | N/A | N/A |
| VR068446 | OP | −3.32 | 1.44 | N/A | N/A | N/A | N/A |
| VR068449 | OP | −3.07 | 1.05 | 0.20 | −0.20 | N/A | N/A |
| VR068450 | OP | −3.05 | 1.24 | 0.40 | −0.40 | N/A | N/A |
| VR068451 | OP | −3.45 | 1.65 | N/A | N/A | N/A | N/A |
| VR103978 | OP | −3.51 | 1.22 | 0.74 | −0.74 | N/A | N/A |
| VR103986 | OP | −1.94 | 0.96 | 0.80 | 0.71 | −0.18 | −1.32 |
| VR104471 | OP | −1.53 | 0.88 | 1.09 | 0.65 | −0.46 | −1.29 |
| VR123074 | OP | −1.83 | 0.81 | 0.62 | 0.65 | −0.12 | −1.14 |
| VR129174 | OP | −3.43 | 1.23 | 0.71 | −0.71 | N/A | N/A |
| VR296036 | OP | −1.74 | 0.56 | N/A | N/A | N/A | N/A |
| VR296053 | OP | −1.86 | 0.63 | N/A | N/A | N/A | N/A |
| VR296062 | OP | −1.97 | 0.50 | N/A | N/A | N/A | N/A |
| VR296162 | OP | −2.88 | 0.60 | N/A | N/A | N/A | N/A |
| VR296170 | OP | −2.25 | 0.83 | N/A | N/A | N/A | N/A |
| VR025362 | FT | −3.54 | 0.85 | N/A | N/A | N/A | N/A |
| VR025363 | FT | −3.21 | 0.79 | N/A | N/A | N/A | N/A |
| VR025364 | FT | −2.41 | 0.98 | N/A | N/A | N/A | N/A |
| VR531238 | FT | −2.32 | 0.58 | N/A | N/A | N/A | N/A |
| VR531239 | FT | −3.62 | 0.98 | N/A | N/A | N/A | N/A |
| VR531240 | FT | −2.46 | 0.57 | N/A | N/A | N/A | N/A |
| VR531493 | FT | −2.34 | 0.67 | N/A | N/A | N/A | N/A |
| VR531503 | FT | −1.71 | 0.49 | N/A | N/A | N/A | N/A |
| VR531505 | FT | −2.24 | 0.45 | N/A | N/A | N/A | N/A |
| VR531506 | FT | −2.01 | 0.90 | N/A | N/A | N/A | N/A |
| VR605031 | FT | −3.52 | 1.67 | N/A | N/A | N/A | N/A |
| VR605032 | FT | −3.40 | 1.31 | N/A | N/A | N/A | N/A |
| VR605033 | FT | −3.04 | 1.13 | 0.24 | −0.24 | N/A | N/A |
| VR605034 | FT | −3.27 | 1.21 | −0.05 | 0.05 | N/A | N/A |

Table 8.C.2 IRT Item Statistics—Oral Language, Grade One

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Item ID** | **Item Type** | **Item Difficulty b** | **Item Discrimination a** | **D1** | **D2** | **D3** | **D4** |
| VR023802 | OP | −3.16 | 0.88 | N/A | N/A | N/A | N/A |
| VR023803 | OP | −3.69 | 0.50 | N/A | N/A | N/A | N/A |
| VR023804 | OP | −4.09 | 0.72 | N/A | N/A | N/A | N/A |
| VR023946 | OP | −3.87 | 0.21 | N/A | N/A | N/A | N/A |
| VR068386 | OP | −2.99 | 1.69 | N/A | N/A | N/A | N/A |
| VR068388 | OP | −2.68 | 1.00 | 0.33 | −0.33 | N/A | N/A |
| VR068389 | OP | −2.68 | 1.30 | 0.21 | −0.21 | N/A | N/A |
| VR068390 | OP | −2.93 | 1.31 | N/A | N/A | N/A | N/A |
| VR068402 | OP | −0.82 | 1.05 | 1.71 | 0.63 | −0.65 | −1.69 |
| VR068406 | OP | −2.97 | 1.19 | 0.65 | −0.65 | N/A | N/A |
| VR069276 | OP | −3.34 | 0.57 | N/A | N/A | N/A | N/A |
| VR069277 | OP | −1.56 | 0.27 | N/A | N/A | N/A | N/A |
| VR069278 | OP | −3.53 | 0.45 | N/A | N/A | N/A | N/A |
| VR122522 | OP | −3.14 | 1.13 | 0.74 | −0.74 | N/A | N/A |
| VR122537 | OP | −1.89 | 1.01 | 0.59 | 0.57 | −0.09 | −1.07 |
| VR127580 | OP | −1.77 | 0.37 | N/A | N/A | N/A | N/A |
| VR127581 | OP | −2.58 | 0.43 | N/A | N/A | N/A | N/A |
| VR127582 | OP | −1.49 | 0.38 | N/A | N/A | N/A | N/A |
| VR127674 | OP | −1.94 | 0.42 | N/A | N/A | N/A | N/A |
| VR127675 | OP | 0.45 | 0.22 | N/A | N/A | N/A | N/A |
| VR127676 | OP | −4.77 | 0.60 | N/A | N/A | N/A | N/A |
| VR127795 | OP | −1.97 | 0.31 | N/A | N/A | N/A | N/A |
| VR127796 | OP | −4.24 | 1.07 | N/A | N/A | N/A | N/A |
| VR127797 | OP | −3.40 | 0.95 | N/A | N/A | N/A | N/A |
| VR142652 | OP | −1.32 | 1.10 | 1.13 | 0.66 | −0.43 | −1.35 |
| VR295990 | OP | −3.05 | 0.42 | N/A | N/A | N/A | N/A |
| VR296018 | OP | −2.02 | 0.42 | N/A | N/A | N/A | N/A |
| VR296715 | OP | −2.92 | 0.40 | N/A | N/A | N/A | N/A |
| VR297479 | OP | −2.96 | 0.56 | N/A | N/A | N/A | N/A |
| VR297511 | OP | −1.91 | 0.44 | N/A | N/A | N/A | N/A |
| VR297540 | OP | −2.06 | 0.44 | N/A | N/A | N/A | N/A |
| VR023889 | FT | −0.97 | 0.52 | N/A | N/A | N/A | N/A |
| VR023917 | FT | −3.04 | 0.62 | N/A | N/A | N/A | N/A |
| VR023944 | FT | −2.52 | 0.41 | N/A | N/A | N/A | N/A |
| VR127712 | FT | −2.74 | 1.07 | N/A | N/A | N/A | N/A |
| VR127713 | FT | −2.42 | 0.77 | N/A | N/A | N/A | N/A |
| VR127714 | FT | −2.56 | 1.02 | N/A | N/A | N/A | N/A |
| VR142654 | FT | −1.34 | 1.52 | 1.34 | 0.67 | −0.63 | −1.38 |
| VR348292 | FT | −3.17 | 1.25 | 0.64 | −0.64 | N/A | N/A |
| VR348298 | FT | −3.23 | 1.19 | 0.77 | −0.77 | N/A | N/A |
| VR348302 | FT | −1.70 | 1.47 | 0.88 | 0.59 | −0.19 | −1.28 |
| VR531564 | FT | −2.78 | 0.52 | N/A | N/A | N/A | N/A |
| VR531575 | FT | −3.31 | 0.76 | N/A | N/A | N/A | N/A |
| VR531713 | FT | −3.06 | 0.57 | N/A | N/A | N/A | N/A |
| VR531714 | FT | −3.10 | 1.34 | N/A | N/A | N/A | N/A |
| VR531715 | FT | −3.82 | 0.47 | N/A | N/A | N/A | N/A |

Table 8.C.3 IRT Item Statistics—Oral Language, Grade Two

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Item ID** | **Item Type** | **Item Difficulty b** | **Item Discrimination a** | **D1** | **D2** | **D3** | **D4** |
| VR008147 | OP | −3.57 | 0.76 | N/A | N/A | N/A | N/A |
| VR008322 | OP | −2.82 | 0.48 | N/A | N/A | N/A | N/A |
| VR026210 | OP | −3.04 | 0.91 | N/A | N/A | N/A | N/A |
| VR026211 | OP | −2.62 | 0.63 | N/A | N/A | N/A | N/A |
| VR026212 | OP | −2.28 | 0.56 | N/A | N/A | N/A | N/A |
| VR026254 | OP | −2.33 | 0.44 | N/A | N/A | N/A | N/A |
| VR026255 | OP | −3.11 | 0.57 | N/A | N/A | N/A | N/A |
| VR026256 | OP | −3.73 | 0.66 | N/A | N/A | N/A | N/A |
| VR027965 | OP | −1.52 | 0.38 | N/A | N/A | N/A | N/A |
| VR027966 | OP | −1.53 | 0.19 | N/A | N/A | N/A | N/A |
| VR027967 | OP | −2.28 | 0.36 | N/A | N/A | N/A | N/A |
| VR068413 | OP | −2.66 | 1.22 | 0.24 | −0.24 | N/A | N/A |
| VR068414 | OP | −2.78 | 1.13 | −0.04 | 0.04 | N/A | N/A |
| VR068415 | OP | −3.03 | 1.35 | N/A | N/A | N/A | N/A |
| VR068417 | OP | −3.46 | 1.21 | N/A | N/A | N/A | N/A |
| VR068430 | OP | −1.06 | 0.91 | 1.53 | 0.66 | −0.50 | −1.69 |
| VR069429 | OP | −2.12 | 0.37 | N/A | N/A | N/A | N/A |
| VR069430 | OP | −0.50 | 0.30 | N/A | N/A | N/A | N/A |
| VR069431 | OP | −1.30 | 0.27 | N/A | N/A | N/A | N/A |
| VR069577 | OP | −2.95 | 0.92 | N/A | N/A | N/A | N/A |
| VR069578 | OP | −2.41 | 0.44 | N/A | N/A | N/A | N/A |
| VR069579 | OP | −0.65 | 0.36 | N/A | N/A | N/A | N/A |
| VR104029 | OP | −2.25 | 0.59 | 0.50 | −0.50 | N/A | N/A |
| VR104040 | OP | −3.15 | 1.20 | 0.65 | −0.65 | N/A | N/A |
| VR126860 | OP | −1.08 | 0.48 | N/A | N/A | N/A | N/A |
| VR126861 | OP | −1.78 | 0.27 | N/A | N/A | N/A | N/A |
| VR126862 | OP | −1.15 | 0.28 | N/A | N/A | N/A | N/A |
| VR126891 | OP | −1.19 | 0.30 | N/A | N/A | N/A | N/A |
| VR126892 | OP | −2.58 | 0.49 | N/A | N/A | N/A | N/A |
| VR127447 | OP | −2.96 | 0.93 | 0.99 | −0.99 | N/A | N/A |
| VR127471 | OP | −2.12 | 0.64 | 0.02 | −0.02 | N/A | N/A |
| VR141353 | OP | −0.94 | 0.85 | 1.21 | 0.91 | −0.44 | −1.69 |
| VR248227 | OP | −1.95 | 0.81 | 0.27 | 0.74 | 0.06 | −1.07 |
| VR348081 | OP | −2.47 | 0.57 | −0.22 | 0.22 | N/A | N/A |
| VR025896 | FT | −0.52 | 0.34 | N/A | N/A | N/A | N/A |
| VR025897 | FT | −2.48 | 0.55 | N/A | N/A | N/A | N/A |
| VR025898 | FT | −2.22 | 0.71 | N/A | N/A | N/A | N/A |
| VR026284 | FT | −3.08 | 0.96 | N/A | N/A | N/A | N/A |
| VR026285 | FT | −3.22 | 0.60 | N/A | N/A | N/A | N/A |
| VR026286 | FT | −2.62 | 0.63 | N/A | N/A | N/A | N/A |
| VR530330 | FT | −2.71 | 0.29 | N/A | N/A | N/A | N/A |
| VR530331 | FT | −2.80 | 0.41 | N/A | N/A | N/A | N/A |
| VR530554 | FT | −3.61 | 0.70 | N/A | N/A | N/A | N/A |
| VR530591 | FT | −4.22 | 0.81 | N/A | N/A | N/A | N/A |
| VR530600 | FT | −1.17 | 0.34 | N/A | N/A | N/A | N/A |
| VR605246 | FT | −2.89 | 1.49 | N/A | N/A | N/A | N/A |
| VR605247 | FT | −3.70 | 1.03 | N/A | N/A | N/A | N/A |
| VR605249 | FT | −2.73 | 0.64 | −0.15 | 0.15 | N/A | N/A |
| VR605250 | FT | −2.87 | 0.88 | 0.62 | −0.62 | N/A | N/A |
| VR605256 | FT | −3.47 | 1.18 | 0.83 | −0.83 | N/A | N/A |
| VR605257 | FT | −1.14 | 0.98 | 1.55 | 0.72 | −0.54 | −1.73 |

Table 8.C.4 IRT Item Statistics—Oral Language, Grade Span Three Through Five

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Item ID** | **Item Type** | **Item Difficulty b** | **Item Discrimination a** | **D1** | **D2** | **D3** | **D4** |
| VR008931 | OP | −3.02 | 0.52 | N/A | N/A | N/A | N/A |
| VR008961 | OP | −2.97 | 0.72 | N/A | N/A | N/A | N/A |
| VR008997 | OP | −2.87 | 0.46 | N/A | N/A | N/A | N/A |
| VR021733 | OP | −3.17 | 0.50 | N/A | N/A | N/A | N/A |
| VR021734 | OP | −3.97 | 0.41 | N/A | N/A | N/A | N/A |
| VR021735 | OP | −2.95 | 0.58 | N/A | N/A | N/A | N/A |
| VR027010 | OP | −2.35 | 0.57 | N/A | N/A | N/A | N/A |
| VR027011 | OP | −1.17 | 0.24 | N/A | N/A | N/A | N/A |
| VR027012 | OP | −2.51 | 0.35 | N/A | N/A | N/A | N/A |
| VR028285 | OP | −0.37 | 0.13 | N/A | N/A | N/A | N/A |
| VR028286 | OP | −0.39 | 0.24 | N/A | N/A | N/A | N/A |
| VR028288 | OP | 1.41 | 0.14 | N/A | N/A | N/A | N/A |
| VR028289 | OP | 0.21 | 0.22 | N/A | N/A | N/A | N/A |
| VR068503 | OP | −2.67 | 1.01 | N/A | N/A | N/A | N/A |
| VR068505 | OP | −1.55 | 0.62 | 0.24 | −0.24 | N/A | N/A |
| VR068506 | OP | −2.66 | 0.84 | −0.30 | 0.30 | N/A | N/A |
| VR068507 | OP | −2.44 | 1.10 | N/A | N/A | N/A | N/A |
| VR068516 | OP | −1.00 | 0.86 | 1.69 | 0.91 | −0.59 | −2.01 |
| VR104316 | OP | −2.12 | 0.61 | 0.41 | −0.41 | N/A | N/A |
| VR127482 | OP | −2.87 | 0.38 | N/A | N/A | N/A | N/A |
| VR127483 | OP | −2.49 | 0.34 | N/A | N/A | N/A | N/A |
| VR127485 | OP | −1.97 | 0.32 | N/A | N/A | N/A | N/A |
| VR128602 | OP | −1.73 | 0.79 | 1.12 | 0.14 | −1.27 | N/A |
| VR128616 | OP | −2.14 | 0.75 | 1.52 | 0.11 | −1.63 | N/A |
| VR141080 | OP | −1.62 | 0.75 | 0.55 | −0.55 | N/A | N/A |
| VR141151 | OP | −0.98 | 0.98 | 1.39 | 0.97 | −0.42 | −1.94 |
| VR141166 | OP | −2.47 | 0.66 | N/A | N/A | N/A | N/A |
| VR141168 | OP | −3.35 | 0.52 | N/A | N/A | N/A | N/A |
| VR141235 | OP | −1.43 | 0.26 | N/A | N/A | N/A | N/A |
| VR256940 | OP | −1.51 | 0.60 | 0.61 | −0.61 | N/A | N/A |
| VR295383 | OP | −2.13 | 0.37 | N/A | N/A | N/A | N/A |
| VR295384 | OP | −2.08 | 0.35 | N/A | N/A | N/A | N/A |
| VR295388 | OP | −1.72 | 0.31 | N/A | N/A | N/A | N/A |
| VR362866 | OP | −1.59 | 0.79 | 0.61 | 1.09 | 0.19 | −1.89 |
| VR009026 | FT | −2.18 | 0.66 | N/A | N/A | N/A | N/A |
| VR069573 | FT | −2.45 | 0.39 | N/A | N/A | N/A | N/A |
| VR069574 | FT | −2.19 | 0.68 | N/A | N/A | N/A | N/A |
| VR069575 | FT | −1.28 | 0.27 | N/A | N/A | N/A | N/A |
| VR530775 | FT | −3.65 | 0.31 | N/A | N/A | N/A | N/A |
| VR530776 | FT | −2.57 | 0.64 | N/A | N/A | N/A | N/A |
| VR530777 | FT | −2.53 | 0.49 | N/A | N/A | N/A | N/A |
| VR530876 | FT | −2.34 | 0.49 | N/A | N/A | N/A | N/A |
| VR530877 | FT | −0.80 | 0.37 | N/A | N/A | N/A | N/A |
| VR530878 | FT | −0.25 | 0.21 | N/A | N/A | N/A | N/A |
| VR530941 | FT | −1.68 | 0.29 | N/A | N/A | N/A | N/A |
| VR605260 | FT | −3.10 | 1.20 | N/A | N/A | N/A | N/A |
| VR605261 | FT | −2.66 | 1.51 | N/A | N/A | N/A | N/A |
| VR605262 | FT | −2.40 | 0.95 | −0.07 | 0.07 | N/A | N/A |
| VR605263 | FT | −2.37 | 0.88 | 0.42 | −0.42 | N/A | N/A |
| VR605266 | FT | −1.57 | 0.47 | 0.87 | −0.87 | N/A | N/A |
| VR605267 | FT | −1.19 | 1.07 | 1.27 | 0.97 | −0.38 | −1.86 |

Table 8.C.5 IRT Item Statistics—Oral Language, Grade Span Six Through Eight

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Item ID** | **Item Type** | **Item Difficulty b** | **Item Discrimination a** | **D1** | **D2** | **D3** | **D4** |
| VR008445 | OP | −3.65 | 0.60 | N/A | N/A | N/A | N/A |
| VR008519 | OP | −2.35 | 0.49 | N/A | N/A | N/A | N/A |
| VR008578 | OP | −1.71 | 0.35 | N/A | N/A | N/A | N/A |
| VR009173 | OP | −3.98 | 0.26 | N/A | N/A | N/A | N/A |
| VR009174 | OP | −3.69 | 0.41 | N/A | N/A | N/A | N/A |
| VR009175 | OP | −2.85 | 0.41 | N/A | N/A | N/A | N/A |
| VR023079 | OP | −1.70 | 0.26 | N/A | N/A | N/A | N/A |
| VR023080 | OP | −2.38 | 0.23 | N/A | N/A | N/A | N/A |
| VR023082 | OP | −2.01 | 0.39 | N/A | N/A | N/A | N/A |
| VR023083 | OP | −2.07 | 0.33 | N/A | N/A | N/A | N/A |
| VR068556 | OP | −1.10 | 0.70 | 0.98 | 0.32 | −1.30 | N/A |
| VR068557 | OP | −1.18 | 0.74 | 0.87 | 0.21 | −1.08 | N/A |
| VR068565 | OP | −0.81 | 0.75 | 1.38 | 0.96 | −0.27 | −2.07 |
| VR072363 | OP | −0.95 | 0.45 | N/A | N/A | N/A | N/A |
| VR072365 | OP | 0.67 | 0.27 | N/A | N/A | N/A | N/A |
| VR072366 | OP | −1.34 | 0.40 | N/A | N/A | N/A | N/A |
| VR072367 | OP | −0.80 | 0.27 | N/A | N/A | N/A | N/A |
| VR127720 | OP | −2.02 | 0.65 | −0.05 | 0.05 | N/A | N/A |
| VR127723 | OP | −2.11 | 0.62 | 0.58 | −0.58 | N/A | N/A |
| VR127979 | OP | −0.62 | 0.65 | 1.16 | 0.08 | −1.24 | N/A |
| VR127981 | OP | −0.33 | 0.49 | 1.14 | −0.20 | −0.94 | N/A |
| VR141145 | OP | −0.22 | 0.74 | 1.85 | 1.08 | −0.69 | −2.24 |
| VR193985 | OP | −2.49 | 0.39 | N/A | N/A | N/A | N/A |
| VR194003 | OP | −2.49 | 0.30 | N/A | N/A | N/A | N/A |
| VR194015 | OP | −0.12 | 0.29 | N/A | N/A | N/A | N/A |
| VR294690 | OP | 1.00 | 0.05 | N/A | N/A | N/A | N/A |
| VR294711 | OP | −1.21 | 0.19 | N/A | N/A | N/A | N/A |
| VR294713 | OP | −2.38 | 0.28 | N/A | N/A | N/A | N/A |
| VR294716 | OP | −1.67 | 0.26 | N/A | N/A | N/A | N/A |
| VR301989 | OP | −0.31 | 0.21 | N/A | N/A | N/A | N/A |
| VR348362 | OP | −3.13 | 0.69 | N/A | N/A | N/A | N/A |
| VR348370 | OP | −2.51 | 0.76 | 0.05 | −0.05 | N/A | N/A |
| VR348379 | OP | −2.54 | 0.70 | −0.34 | 0.34 | N/A | N/A |
| VR348800 | OP | −2.62 | 1.09 | N/A | N/A | N/A | N/A |
| VR008872 | FT | −0.96 | 0.22 | N/A | N/A | N/A | N/A |
| VR069917 | FT | 1.20 | 0.25 | N/A | N/A | N/A | N/A |
| VR069918 | FT | −1.75 | 0.27 | N/A | N/A | N/A | N/A |
| VR069919 | FT | 0.16 | 0.19 | N/A | N/A | N/A | N/A |
| VR104325 | FT | −2.12 | 0.57 | −0.05 | 0.05 | N/A | N/A |
| VR104328 | FT | −2.09 | 0.55 | −0.07 | 0.07 | N/A | N/A |
| VR128154 | FT | −0.86 | 0.82 | 1.08 | 0.23 | −1.32 | N/A |
| VR128172 | FT | −0.94 | 0.80 | 0.98 | 0.28 | −1.26 | N/A |
| VR141090 | FT | −0.49 | 0.75 | 1.49 | 1.00 | −0.31 | −2.17 |
| VR531853 | FT | −2.38 | 0.39 | N/A | N/A | N/A | N/A |
| VR531854 | FT | 15.34 | 0.01 | N/A | N/A | N/A | N/A |
| VR531855 | FT | 1.45 | 0.22 | N/A | N/A | N/A | N/A |
| VR531856 | FT | −1.15 | 0.32 | N/A | N/A | N/A | N/A |
| VR605276 | FT | −1.27 | 0.78 | 1.05 | 0.23 | −1.28 | N/A |

Table 8.C.6 IRT Item Statistics—Oral Language, Grade Span Nine and Ten

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Item ID** | **Item Type** | **Item Difficulty b** | **Item Discrimination a** | **D1** | **D2** | **D3** | **D4** |
| VR008525 | OP | −5.08 | 0.22 | N/A | N/A | N/A | N/A |
| VR008649 | OP | −2.93 | 0.35 | N/A | N/A | N/A | N/A |
| VR008705 | OP | −1.90 | 0.31 | N/A | N/A | N/A | N/A |
| VR021863 | OP | −0.45 | 0.09 | N/A | N/A | N/A | N/A |
| VR021864 | OP | 2.56 | 0.14 | N/A | N/A | N/A | N/A |
| VR021865 | OP | −0.30 | 0.25 | N/A | N/A | N/A | N/A |
| VR021866 | OP | −2.30 | 0.30 | N/A | N/A | N/A | N/A |
| VR028561 | OP | 0.16 | 0.21 | N/A | N/A | N/A | N/A |
| VR028563 | OP | −1.50 | 0.17 | N/A | N/A | N/A | N/A |
| VR028564 | OP | 0.35 | 0.18 | N/A | N/A | N/A | N/A |
| VR028565 | OP | −1.96 | 0.36 | N/A | N/A | N/A | N/A |
| VR068570 | OP | −2.69 | 1.06 | N/A | N/A | N/A | N/A |
| VR068572 | OP | −2.23 | 0.53 | −0.02 | 0.02 | N/A | N/A |
| VR068573 | OP | −2.15 | 0.88 | 0.35 | −0.35 | N/A | N/A |
| VR068574 | OP | −2.92 | 0.73 | N/A | N/A | N/A | N/A |
| VR068599 | OP | −0.60 | 0.61 | 1.59 | 1.28 | −0.38 | −2.49 |
| VR069743 | OP | −1.57 | 0.35 | N/A | N/A | N/A | N/A |
| VR069744 | OP | −1.99 | 0.22 | N/A | N/A | N/A | N/A |
| VR069745 | OP | −1.29 | 0.25 | N/A | N/A | N/A | N/A |
| VR070819 | OP | −1.51 | 0.42 | N/A | N/A | N/A | N/A |
| VR070820 | OP | −2.11 | 0.34 | N/A | N/A | N/A | N/A |
| VR070821 | OP | −5.40 | 0.25 | N/A | N/A | N/A | N/A |
| VR071454 | OP | −4.42 | 0.26 | N/A | N/A | N/A | N/A |
| VR104762 | OP | −1.71 | 0.69 | 1.00 | 0.27 | −1.27 | N/A |
| VR104775 | OP | −1.43 | 0.67 | 0.80 | 0.33 | −1.12 | N/A |
| VR104796 | OP | −1.94 | 0.73 | 0.08 | −0.08 | N/A | N/A |
| VR104806 | OP | −2.04 | 0.55 | 0.15 | −0.15 | N/A | N/A |
| VR104813 | OP | −1.58 | 0.44 | 0.53 | 0.52 | −1.05 | N/A |
| VR104854 | OP | −1.43 | 0.46 | 0.39 | −0.30 | −0.09 | N/A |
| VR256931 | OP | −0.55 | 0.57 | 1.69 | 1.22 | −0.41 | −2.51 |
| VR292495 | OP | 0.21 | 0.16 | N/A | N/A | N/A | N/A |
| VR292510 | OP | 0.89 | 0.11 | N/A | N/A | N/A | N/A |
| VR292524 | OP | 2.30 | 0.15 | N/A | N/A | N/A | N/A |
| VR292530 | OP | −2.88 | 0.23 | N/A | N/A | N/A | N/A |
| VR032260 | FT | −0.67 | 0.48 | 0.85 | 0.78 | −1.63 | N/A |
| VR032261 | FT | −0.88 | 0.52 | 0.53 | 0.26 | −0.79 | N/A |
| VR348707 | FT | 0.19 | 0.58 | 1.45 | 1.35 | −0.32 | −2.49 |
| VR528943 | FT | −3.01 | 0.23 | N/A | N/A | N/A | N/A |
| VR528944 | FT | −1.35 | 0.23 | N/A | N/A | N/A | N/A |
| VR528945 | FT | −2.99 | 0.36 | N/A | N/A | N/A | N/A |
| VR545635 | FT | 2.78 | 0.03 | N/A | N/A | N/A | N/A |
| VR545638 | FT | 4.40 | 0.13 | N/A | N/A | N/A | N/A |
| VR545639 | FT | 1.40 | 0.14 | N/A | N/A | N/A | N/A |
| VR545640 | FT | −2.58 | 0.18 | N/A | N/A | N/A | N/A |
| VR545687 | FT | 1.94 | 0.23 | N/A | N/A | N/A | N/A |
| VR545691 | FT | −1.36 | 0.15 | N/A | N/A | N/A | N/A |
| VR545694 | FT | −0.75 | 0.20 | N/A | N/A | N/A | N/A |
| VR545702 | FT | −0.45 | 0.27 | N/A | N/A | N/A | N/A |
| VR605282 | FT | −1.50 | 0.57 | 0.90 | 0.51 | −1.41 | N/A |
| VR605283 | FT | −1.28 | 0.50 | 0.87 | −0.16 | −0.70 | N/A |
| VR605284 | FT | −0.13 | 0.60 | 1.49 | 1.59 | −0.41 | −2.67 |

Table 8.C.7 IRT Item Statistics—Oral Language, Grade Span Eleven and Twelve

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Item ID** | **Item Type** | **Item Difficulty b** | **Item Discrimination a** | **D1** | **D2** | **D3** | **D4** |
| VR007128 | OP | −0.90 | 0.33 | N/A | N/A | N/A | N/A |
| VR007153 | OP | −1.09 | 0.42 | N/A | N/A | N/A | N/A |
| VR007170 | OP | −0.50 | 0.22 | N/A | N/A | N/A | N/A |
| VR021928 | OP | −1.87 | 0.34 | N/A | N/A | N/A | N/A |
| VR021932 | OP | −1.35 | 0.30 | N/A | N/A | N/A | N/A |
| VR021935 | OP | −0.70 | 0.23 | N/A | N/A | N/A | N/A |
| VR021938 | OP | −2.63 | 0.21 | N/A | N/A | N/A | N/A |
| VR026988 | OP | −0.56 | 0.18 | N/A | N/A | N/A | N/A |
| VR026989 | OP | 0.80 | 0.14 | N/A | N/A | N/A | N/A |
| VR026990 | OP | 0.69 | 0.11 | N/A | N/A | N/A | N/A |
| VR026991 | OP | −0.32 | 0.18 | N/A | N/A | N/A | N/A |
| VR033466 | OP | −1.72 | 0.49 | 0.52 | −0.52 | N/A | N/A |
| VR068477 | OP | −2.73 | 1.26 | N/A | N/A | N/A | N/A |
| VR068479 | OP | −2.34 | 0.82 | −0.02 | 0.02 | N/A | N/A |
| VR068480 | OP | −2.24 | 0.67 | 0.41 | −0.41 | N/A | N/A |
| VR068481 | OP | −3.00 | 1.12 | N/A | N/A | N/A | N/A |
| VR068493 | OP | −0.28 | 0.59 | 1.80 | 1.44 | −0.58 | −2.66 |
| VR087137 | OP | −1.70 | 0.52 | 0.83 | 0.30 | −1.13 | N/A |
| VR087185 | OP | −1.53 | 0.51 | 0.55 | −0.32 | −0.23 | N/A |
| VR104872 | OP | −1.23 | 0.68 | 0.97 | 0.30 | −1.27 | N/A |
| VR122500 | OP | −0.99 | 0.48 | 0.92 | −0.92 | N/A | N/A |
| VR129889 | OP | −1.78 | 0.24 | N/A | N/A | N/A | N/A |
| VR129890 | OP | −1.29 | 0.19 | N/A | N/A | N/A | N/A |
| VR129892 | OP | −0.40 | 0.30 | N/A | N/A | N/A | N/A |
| VR129893 | OP | −0.23 | 0.27 | N/A | N/A | N/A | N/A |
| VR129919 | OP | −0.78 | 0.26 | N/A | N/A | N/A | N/A |
| VR129920 | OP | −1.70 | 0.27 | N/A | N/A | N/A | N/A |
| VR129921 | OP | −1.60 | 0.37 | N/A | N/A | N/A | N/A |
| VR129923 | OP | 1.21 | 0.10 | N/A | N/A | N/A | N/A |
| VR141726 | OP | −1.17 | 0.70 | 0.93 | 0.28 | −1.21 | N/A |
| VR142059 | OP | −0.77 | 0.57 | 1.17 | 1.25 | −0.25 | −2.17 |
| VR299779 | OP | −1.44 | 0.30 | N/A | N/A | N/A | N/A |
| VR299780 | OP | −3.44 | 0.39 | N/A | N/A | N/A | N/A |
| VR299782 | OP | −3.68 | 0.40 | N/A | N/A | N/A | N/A |
| VR007188 | FT | −2.40 | 0.34 | N/A | N/A | N/A | N/A |
| VR007223 | FT | −1.30 | 0.43 | N/A | N/A | N/A | N/A |
| VR128819 | FT | −0.91 | 0.51 | 0.73 | 0.32 | −1.05 | N/A |
| VR128821 | FT | −0.60 | 0.41 | 1.11 | −0.45 | −0.66 | N/A |
| VR348190 | FT | −1.15 | 0.56 | 0.16 | −0.16 | N/A | N/A |
| VR348387 | FT | −0.04 | 0.40 | 0.68 | 2.00 | −0.39 | −2.30 |
| VR531083 | FT | −3.48 | 0.31 | N/A | N/A | N/A | N/A |
| VR531084 | FT | 0.02 | 0.17 | N/A | N/A | N/A | N/A |
| VR531085 | FT | 2.50 | 0.09 | N/A | N/A | N/A | N/A |
| VR531086 | FT | −1.06 | 0.20 | N/A | N/A | N/A | N/A |
| VR531120 | FT | −2.33 | 0.48 | N/A | N/A | N/A | N/A |
| VR531131 | FT | −1.04 | 0.25 | N/A | N/A | N/A | N/A |
| VR531133 | FT | 0.23 | 0.19 | N/A | N/A | N/A | N/A |
| VR531134 | FT | −1.77 | 0.40 | N/A | N/A | N/A | N/A |
| VR531136 | FT | −1.04 | 0.24 | N/A | N/A | N/A | N/A |
| VR630507 | FT | −1.71 | 0.47 | 0.45 | −0.45 | N/A | N/A |

Table 8.C.8 IRT Item Statistics—Written Language, Kindergarten

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Item ID** | **Item Type** | **Item Difficulty b** | **Item Discrimination a** | **D1** | **D2** | **D3** | **D4** |
| VH574038 | OP | −3.79 | 1.46 | N/A | N/A | N/A | N/A |
| VH574059 | OP | −4.01 | 1.62 | N/A | N/A | N/A | N/A |
| VH574063 | OP | −3.68 | 1.63 | 0.18 | −0.18 | N/A | N/A |
| VH574079 | OP | −3.50 | 1.72 | 0.22 | −0.22 | N/A | N/A |
| VH590330 | OP | −4.40 | 1.05 | N/A | N/A | N/A | N/A |
| VH590343 | OP | −4.88 | 1.03 | N/A | N/A | N/A | N/A |
| VH590348 | OP | −3.60 | 1.64 | 0.44 | −0.44 | N/A | N/A |
| VH590354 | OP | −3.70 | 1.41 | 0.36 | −0.36 | N/A | N/A |
| VR001442 | OP | −4.10 | 0.59 | N/A | N/A | N/A | N/A |
| VR001443 | OP | −5.14 | 0.56 | N/A | N/A | N/A | N/A |
| VR001444 | OP | −5.29 | 0.32 | N/A | N/A | N/A | N/A |
| VR001517 | OP | −5.08 | 0.51 | N/A | N/A | N/A | N/A |
| VR001518 | OP | −5.01 | 0.37 | N/A | N/A | N/A | N/A |
| VR001519 | OP | −3.83 | 0.57 | N/A | N/A | N/A | N/A |
| VR002244 | OP | −3.93 | 1.33 | 1.33 | −1.33 | N/A | N/A |
| VR002245 | OP | −5.26 | 0.66 | N/A | N/A | N/A | N/A |
| VR002271 | OP | −4.18 | 1.37 | 1.41 | −1.41 | N/A | N/A |
| VR002272 | OP | −4.08 | 0.57 | N/A | N/A | N/A | N/A |
| VR291410 | OP | −4.19 | 0.51 | −0.29 | 0.29 | N/A | N/A |
| VR291447 | OP | −4.20 | 0.53 | N/A | N/A | N/A | N/A |
| VR291451 | OP | −4.80 | 0.49 | N/A | N/A | N/A | N/A |
| VR291460 | OP | −4.29 | 0.63 | N/A | N/A | N/A | N/A |
| VR291323 | FT | −4.31 | 0.62 | −0.11 | 0.11 | N/A | N/A |
| VR291359 | FT | −5.25 | 0.60 | N/A | N/A | N/A | N/A |
| VR291364 | FT | −3.29 | 0.41 | N/A | N/A | N/A | N/A |
| VR291373 | FT | −4.30 | 0.57 | N/A | N/A | N/A | N/A |
| VR546400 | FT | −4.49 | 0.34 | N/A | N/A | N/A | N/A |
| VR546402 | FT | −5.68 | 0.48 | N/A | N/A | N/A | N/A |
| VR546415 | FT | −0.83 | 0.28 | N/A | N/A | N/A | N/A |
| VR546441 | FT | −4.44 | 0.34 | N/A | N/A | N/A | N/A |
| VR546465 | FT | −2.86 | 0.28 | N/A | N/A | N/A | N/A |
| VR546472 | FT | −5.66 | 0.25 | N/A | N/A | N/A | N/A |
| VR552036 | FT | −3.94 | 1.51 | 1.33 | −1.33 | N/A | N/A |
| VR552041 | FT | −4.53 | 0.68 | N/A | N/A | N/A | N/A |
| VR552045 | FT | −3.91 | 1.43 | 1.08 | −1.08 | N/A | N/A |
| VR552048 | FT | −5.21 | 0.69 | N/A | N/A | N/A | N/A |
| VR552469 | FT | −4.38 | 1.50 | N/A | N/A | N/A | N/A |
| VR552475 | FT | −4.13 | 1.01 | N/A | N/A | N/A | N/A |
| VR559517 | FT | −3.65 | 2.08 | 0.32 | −0.32 | N/A | N/A |
| VR559518 | FT | −3.27 | 1.27 | 0.30 | −0.30 | N/A | N/A |

Table 8.C.9 IRT Item Statistics—Written Language, Grade One

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Item ID** | **Item Type** | **Item Difficulty b** | **Item Discrimination a** | **D1** | **D2** | **D3** | **D4** |
| VH575342 | OP | −4.66 | 0.87 | N/A | N/A | N/A | N/A |
| VH575352 | OP | −3.26 | 0.59 | −0.56 | 0.56 | N/A | N/A |
| VH575358 | OP | −2.10 | 0.59 | 0.28 | 0.39 | −0.67 | N/A |
| VH581453 | OP | −1.97 | 1.10 | 0.79 | 0.26 | −1.05 | N/A |
| VR000208 | OP | −3.00 | 0.85 | N/A | N/A | N/A | N/A |
| VR000487 | OP | −2.72 | 0.91 | N/A | N/A | N/A | N/A |
| VR000488 | OP | −2.00 | 0.80 | N/A | N/A | N/A | N/A |
| VR000489 | OP | −1.90 | 0.79 | N/A | N/A | N/A | N/A |
| VR000862 | OP | −3.11 | 1.10 | N/A | N/A | N/A | N/A |
| VR000867 | OP | −2.98 | 0.91 | N/A | N/A | N/A | N/A |
| VR001132 | OP | −3.18 | 0.98 | N/A | N/A | N/A | N/A |
| VR001325 | OP | −3.25 | 1.05 | N/A | N/A | N/A | N/A |
| VR002342 | OP | −2.07 | 0.76 | N/A | N/A | N/A | N/A |
| VR002343 | OP | −1.50 | 0.66 | N/A | N/A | N/A | N/A |
| VR002345 | OP | −2.26 | 0.86 | N/A | N/A | N/A | N/A |
| VR003207 | OP | −1.51 | 0.65 | N/A | N/A | N/A | N/A |
| VR003208 | OP | −1.73 | 0.91 | N/A | N/A | N/A | N/A |
| VR003209 | OP | −1.42 | 0.72 | N/A | N/A | N/A | N/A |
| VR057947 | OP | −2.63 | 0.85 | N/A | N/A | N/A | N/A |
| VR291712 | OP | −1.92 | 1.04 | N/A | N/A | N/A | N/A |
| VR291713 | OP | −2.42 | 0.90 | N/A | N/A | N/A | N/A |
| VR291715 | OP | −2.15 | 0.93 | N/A | N/A | N/A | N/A |
| VR291725 | OP | −1.87 | 0.92 | 0.74 | 0.38 | −1.11 | N/A |
| VR291756 | OP | −2.40 | 1.07 | N/A | N/A | N/A | N/A |
| VR291770 | OP | −1.88 | 0.87 | N/A | N/A | N/A | N/A |
| VR291776 | OP | −2.73 | 0.85 | N/A | N/A | N/A | N/A |
| VR291785 | OP | −2.27 | 1.06 | 0.90 | −0.90 | N/A | N/A |
| VR291792 | OP | −2.24 | 0.70 | 0.44 | 0.33 | −0.76 | N/A |
| VR000868 | FT | −3.05 | 0.79 | N/A | N/A | N/A | N/A |
| VR129557 | FT | −2.39 | 0.56 | N/A | N/A | N/A | N/A |
| VR129558 | FT | −1.20 | 0.56 | N/A | N/A | N/A | N/A |
| VR129559 | FT | −1.84 | 0.88 | N/A | N/A | N/A | N/A |
| VR531743 | FT | −2.44 | 1.33 | 0.64 | −0.64 | N/A | N/A |
| VR531744 | FT | −2.26 | 0.86 | 0.34 | 0.34 | −0.68 | N/A |
| VR531769 | FT | −2.12 | 1.32 | 0.62 | 0.17 | −0.80 | N/A |
| VR546425 | FT | −2.92 | 1.11 | N/A | N/A | N/A | N/A |
| VR554258 | FT | −3.06 | 0.85 | N/A | N/A | N/A | N/A |
| VR554631 | FT | −2.56 | 0.76 | N/A | N/A | N/A | N/A |
| VR554674 | FT | −3.28 | 0.80 | N/A | N/A | N/A | N/A |
| VR554712 | FT | −3.68 | 0.99 | N/A | N/A | N/A | N/A |
| VR554744 | FT | −2.06 | 1.21 | N/A | N/A | N/A | N/A |
| VR554748 | FT | −2.22 | 0.54 | N/A | N/A | N/A | N/A |
| VR554754 | FT | −2.18 | 0.81 | N/A | N/A | N/A | N/A |
| VR554847 | FT | −2.27 | 1.04 | N/A | N/A | N/A | N/A |
| VR554961 | FT | −1.45 | 0.57 | N/A | N/A | N/A | N/A |
| VR554989 | FT | −1.13 | 0.56 | N/A | N/A | N/A | N/A |
| VR555041 | FT | −2.01 | 0.51 | N/A | N/A | N/A | N/A |
| VR555042 | FT | −2.02 | 0.65 | N/A | N/A | N/A | N/A |
| VR555059 | FT | −2.88 | 0.89 | N/A | N/A | N/A | N/A |
| VR555063 | FT | −2.06 | 0.91 | N/A | N/A | N/A | N/A |
| VR555064 | FT | −2.71 | 0.70 | N/A | N/A | N/A | N/A |
| VR555065 | FT | −1.83 | 0.32 | N/A | N/A | N/A | N/A |

Table 8.C.10 IRT Item Statistics—Written Language, Grade Two

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Item ID** | **Item Type** | **Item Difficulty b** | **Item Discrimination a** | **D1** | **D2** | **D3** | **D4** |
| VH573930 | OP | −1.77 | 0.88 | 1.37 | −1.37 | N/A | N/A |
| VH573933 | OP | −1.82 | 0.59 | 0.50 | 0.26 | −0.76 | N/A |
| VH581436 | OP | −1.88 | 0.98 | 0.56 | 0.30 | −0.86 | N/A |
| VH581499 | OP | −1.63 | 1.16 | 1.15 | −1.15 | N/A | N/A |
| VH581501 | OP | −1.63 | 0.72 | 0.73 | 0.27 | −1.01 | N/A |
| VR000398 | OP | −1.55 | 0.55 | N/A | N/A | N/A | N/A |
| VR000399 | OP | −2.61 | 0.52 | N/A | N/A | N/A | N/A |
| VR000400 | OP | −3.25 | 0.63 | N/A | N/A | N/A | N/A |
| VR000877 | OP | −2.48 | 0.81 | N/A | N/A | N/A | N/A |
| VR000880 | OP | −2.60 | 1.34 | N/A | N/A | N/A | N/A |
| VR000885 | OP | −2.36 | 1.43 | N/A | N/A | N/A | N/A |
| VR000890 | OP | −2.68 | 1.41 | N/A | N/A | N/A | N/A |
| VR002582 | OP | −1.46 | 0.69 | N/A | N/A | N/A | N/A |
| VR002583 | OP | −2.64 | 0.84 | N/A | N/A | N/A | N/A |
| VR002584 | OP | −2.01 | 1.26 | N/A | N/A | N/A | N/A |
| VR002585 | OP | −2.14 | 0.98 | N/A | N/A | N/A | N/A |
| VR002824 | OP | −2.17 | 1.32 | N/A | N/A | N/A | N/A |
| VR002825 | OP | −1.94 | 1.03 | N/A | N/A | N/A | N/A |
| VR002826 | OP | −2.03 | 1.38 | N/A | N/A | N/A | N/A |
| VR002827 | OP | −1.93 | 0.51 | N/A | N/A | N/A | N/A |
| VR060237 | OP | −2.04 | 0.48 | N/A | N/A | N/A | N/A |
| VR060242 | OP | −1.39 | 0.69 | N/A | N/A | N/A | N/A |
| VR060248 | OP | −1.61 | 0.63 | N/A | N/A | N/A | N/A |
| VR060250 | OP | −1.60 | 0.76 | N/A | N/A | N/A | N/A |
| VR127064 | OP | −1.92 | 1.04 | N/A | N/A | N/A | N/A |
| VR127065 | OP | −1.54 | 0.43 | N/A | N/A | N/A | N/A |
| VR127066 | OP | −1.24 | 0.31 | N/A | N/A | N/A | N/A |
| VR127067 | OP | 0.22 | 0.19 | N/A | N/A | N/A | N/A |
| VR287087 | OP | −1.31 | 0.70 | 1.00 | 0.89 | −0.37 | −1.53 |
| VR296648 | OP | −1.40 | 0.68 | N/A | N/A | N/A | N/A |
| VR296754 | OP | −1.76 | 0.65 | N/A | N/A | N/A | N/A |
| VR296790 | OP | −1.96 | 0.92 | N/A | N/A | N/A | N/A |
| VR000876 | FT | −2.13 | 1.05 | N/A | N/A | N/A | N/A |
| VR000881 | FT | −1.10 | 0.61 | N/A | N/A | N/A | N/A |
| VR002858 | FT | −1.64 | 0.63 | N/A | N/A | N/A | N/A |
| VR002859 | FT | −1.82 | 0.74 | N/A | N/A | N/A | N/A |
| VR002860 | FT | −1.76 | 0.77 | N/A | N/A | N/A | N/A |
| VR002861 | FT | −2.09 | 0.87 | N/A | N/A | N/A | N/A |
| VR003421 | FT | −1.80 | 0.96 | N/A | N/A | N/A | N/A |
| VR003422 | FT | −0.69 | 0.81 | N/A | N/A | N/A | N/A |
| VR003423 | FT | −0.95 | 0.53 | N/A | N/A | N/A | N/A |
| VR003424 | FT | −1.71 | 0.87 | N/A | N/A | N/A | N/A |
| VR003444 | FT | −1.72 | 0.61 | N/A | N/A | N/A | N/A |
| VR003445 | FT | −2.15 | 0.76 | N/A | N/A | N/A | N/A |
| VR003446 | FT | −1.29 | 0.60 | N/A | N/A | N/A | N/A |
| VR003447 | FT | −2.06 | 1.05 | N/A | N/A | N/A | N/A |
| VR545688 | FT | −2.67 | 1.60 | N/A | N/A | N/A | N/A |
| VR545692 | FT | −2.57 | 1.55 | N/A | N/A | N/A | N/A |
| VR545697 | FT | −1.52 | 0.88 | N/A | N/A | N/A | N/A |
| VR545698 | FT | −2.35 | 0.94 | N/A | N/A | N/A | N/A |
| VR545699 | FT | −1.43 | 0.68 | N/A | N/A | N/A | N/A |
| VR545700 | FT | −1.01 | 0.63 | N/A | N/A | N/A | N/A |
| VR546296 | FT | −1.73 | 0.57 | N/A | N/A | N/A | N/A |
| VR546297 | FT | −1.64 | 0.59 | N/A | N/A | N/A | N/A |
| VR546299 | FT | −1.51 | 0.50 | N/A | N/A | N/A | N/A |
| VR546380 | FT | −1.03 | 0.45 | N/A | N/A | N/A | N/A |
| VR546381 | FT | −0.30 | 0.29 | N/A | N/A | N/A | N/A |
| VR546382 | FT | −2.85 | 0.54 | N/A | N/A | N/A | N/A |
| VR546388 | FT | −1.87 | 1.03 | 0.55 | 0.41 | −0.96 | N/A |
| VR546393 | FT | −1.63 | 1.50 | 1.00 | −1.00 | N/A | N/A |
| VR546396 | FT | −1.77 | 0.63 | 0.31 | 0.42 | −0.72 | N/A |

Table 8.C.11 IRT Item Statistics—Written Language, Grade Span Three Through Five

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Item ID** | **Item Type** | **Item Difficulty b** | **Item Discrimination a** | **D1** | **D2** | **D3** | **D4** |
| VH985169 | OP | 2.15 | 0.26 | N/A | N/A | N/A | N/A |
| VH985171 | OP | 1.40 | 0.37 | N/A | N/A | N/A | N/A |
| VH985172 | OP | 0.17 | 0.30 | N/A | N/A | N/A | N/A |
| VH985173 | OP | 2.00 | 0.25 | N/A | N/A | N/A | N/A |
| VH985174 | OP | −0.20 | 0.46 | N/A | N/A | N/A | N/A |
| VH985175 | OP | 2.29 | 0.20 | N/A | N/A | N/A | N/A |
| VH991164 | OP | 0.13 | 0.47 | N/A | N/A | N/A | N/A |
| VH991165 | OP | 0.12 | 0.51 | N/A | N/A | N/A | N/A |
| VH991166 | OP | −0.80 | 0.68 | N/A | N/A | N/A | N/A |
| VH992102 | OP | −1.96 | 0.83 | N/A | N/A | N/A | N/A |
| VH992105 | OP | −1.96 | 1.39 | N/A | N/A | N/A | N/A |
| VR026361 | OP | −1.25 | 0.73 | 0.85 | −0.85 | N/A | N/A |
| VR026363 | OP | −1.33 | 0.75 | 0.58 | −0.58 | N/A | N/A |
| VR029495 | OP | −0.33 | 1.02 | 1.74 | 0.99 | −0.32 | −2.42 |
| VR029800 | OP | −0.12 | 1.01 | 2.00 | 0.96 | −0.56 | −2.41 |
| VR128230 | OP | 1.27 | 0.27 | N/A | N/A | N/A | N/A |
| VR128231 | OP | 0.07 | 0.27 | N/A | N/A | N/A | N/A |
| VR128232 | OP | 0.86 | 0.49 | N/A | N/A | N/A | N/A |
| VR128234 | OP | 7.88 | 0.08 | N/A | N/A | N/A | N/A |
| VR128235 | OP | 1.04 | 0.33 | N/A | N/A | N/A | N/A |
| VR128237 | OP | 0.43 | 0.23 | N/A | N/A | N/A | N/A |
| VR128975 | OP | 0.50 | 0.44 | N/A | N/A | N/A | N/A |
| VR128976 | OP | −0.42 | 0.63 | N/A | N/A | N/A | N/A |
| VR128980 | OP | −0.68 | 0.65 | N/A | N/A | N/A | N/A |
| VR297550 | OP | −0.57 | 1.12 | N/A | N/A | N/A | N/A |
| VR297833 | OP | −1.29 | 0.94 | N/A | N/A | N/A | N/A |
| VR297844 | OP | −0.61 | 0.75 | N/A | N/A | N/A | N/A |
| VR297903 | OP | −0.92 | 0.86 | N/A | N/A | N/A | N/A |
| VR297910 | OP | −0.81 | 0.63 | 1.07 | −1.07 | N/A | N/A |
| VR297912 | OP | −0.41 | 0.66 | N/A | N/A | N/A | N/A |
| VR297914 | OP | −0.73 | 0.67 | 1.04 | 0.18 | −1.23 | N/A |
| VR297916 | OP | 0.09 | 0.39 | N/A | N/A | N/A | N/A |
| VH992093 | FT | −1.88 | 0.64 | N/A | N/A | N/A | N/A |
| VR554368 | FT | −1.85 | 1.63 | N/A | N/A | N/A | N/A |
| VR554440 | FT | −2.37 | 0.88 | N/A | N/A | N/A | N/A |
| VR554518 | FT | 0.89 | 0.39 | N/A | N/A | N/A | N/A |
| VR554702 | FT | −1.11 | 0.51 | N/A | N/A | N/A | N/A |
| VR554705 | FT | 5.60 | 0.11 | N/A | N/A | N/A | N/A |
| VR554707 | FT | 1.15 | 0.25 | N/A | N/A | N/A | N/A |
| VR554713 | FT | −0.42 | 0.47 | N/A | N/A | N/A | N/A |
| VR554714 | FT | 1.29 | 0.35 | N/A | N/A | N/A | N/A |
| VR554745 | FT | −0.21 | 0.45 | N/A | N/A | N/A | N/A |
| VR554747 | FT | −0.78 | 0.53 | N/A | N/A | N/A | N/A |
| VR554749 | FT | −0.55 | 0.90 | N/A | N/A | N/A | N/A |
| VR554750 | FT | −0.03 | 0.94 | 1.36 | 0.84 | −0.68 | −1.52 |
| VR554751 | FT | −0.79 | 0.65 | N/A | N/A | N/A | N/A |
| VR554760 | FT | −0.73 | 0.72 | N/A | N/A | N/A | N/A |
| VR554763 | FT | 0.06 | 0.24 | N/A | N/A | N/A | N/A |
| VR554773 | FT | 0.20 | 0.46 | N/A | N/A | N/A | N/A |
| VR554778 | FT | −0.14 | 0.35 | N/A | N/A | N/A | N/A |
| VR554796 | FT | −0.43 | 0.67 | 0.99 | −0.99 | N/A | N/A |
| VR554808 | FT | −1.16 | 0.73 | 0.56 | −0.56 | N/A | N/A |

Table 8.C.12 IRT Item Statistics—Written Language, Grade Span Six Through Eight

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Item ID** | **Item Type** | **Item Difficulty b** | **Item Discrimination a** | **D1** | **D2** | **D3** | **D4** |
| VH990947 | OP | 0.33 | 0.35 | N/A | N/A | N/A | N/A |
| VH990948 | OP | −0.05 | 0.47 | N/A | N/A | N/A | N/A |
| VH990950 | OP | 3.06 | 0.28 | N/A | N/A | N/A | N/A |
| VH991333 | OP | 1.83 | 0.22 | N/A | N/A | N/A | N/A |
| VH991334 | OP | 1.61 | 0.51 | N/A | N/A | N/A | N/A |
| VH991335 | OP | 0.60 | 0.39 | N/A | N/A | N/A | N/A |
| VH991336 | OP | 1.78 | 0.34 | N/A | N/A | N/A | N/A |
| VH991338 | OP | 1.18 | 0.28 | N/A | N/A | N/A | N/A |
| VH991339 | OP | 1.22 | 0.39 | N/A | N/A | N/A | N/A |
| VR026221 | OP | −1.22 | 0.54 | 0.68 | −0.68 | N/A | N/A |
| VR026223 | OP | −0.63 | 0.59 | 1.02 | −1.02 | N/A | N/A |
| VR028567 | OP | −0.24 | 0.65 | 0.97 | 0.39 | −1.35 | N/A |
| VR028568 | OP | −0.84 | 0.60 | 0.98 | −0.98 | N/A | N/A |
| VR029169 | OP | 0.07 | 0.80 | 1.31 | 1.24 | 0.12 | −2.66 |
| VR029526 | OP | 0.37 | 0.83 | 1.94 | 0.94 | −0.31 | −2.57 |
| VR066640 | OP | 0.00 | 0.34 | N/A | N/A | N/A | N/A |
| VR066898 | OP | 0.10 | 0.50 | N/A | N/A | N/A | N/A |
| VR067119 | OP | −0.13 | 0.43 | N/A | N/A | N/A | N/A |
| VR067121 | OP | 0.03 | 0.48 | N/A | N/A | N/A | N/A |
| VR067271 | OP | 0.15 | 0.64 | N/A | N/A | N/A | N/A |
| VR067274 | OP | 0.25 | 0.50 | N/A | N/A | N/A | N/A |
| VR195084 | OP | −0.72 | 0.43 | N/A | N/A | N/A | N/A |
| VR195095 | OP | −1.30 | 0.48 | N/A | N/A | N/A | N/A |
| VR195103 | OP | −0.35 | 0.46 | N/A | N/A | N/A | N/A |
| VR287793 | OP | 0.01 | 0.76 | N/A | N/A | N/A | N/A |
| VR287797 | OP | −0.26 | 0.32 | N/A | N/A | N/A | N/A |
| VR287801 | OP | 1.05 | 0.23 | N/A | N/A | N/A | N/A |
| VR287819 | OP | 0.64 | 0.51 | N/A | N/A | N/A | N/A |
| VR287826 | OP | 0.63 | 0.53 | N/A | N/A | N/A | N/A |
| VR287920 | OP | −0.22 | 0.62 | N/A | N/A | N/A | N/A |
| VR287925 | OP | −0.57 | 0.69 | N/A | N/A | N/A | N/A |
| VR287929 | OP | 0.70 | 0.41 | N/A | N/A | N/A | N/A |
| VR554660 | FT | 0.07 | 0.53 | 1.43 | −1.43 | N/A | N/A |
| VR554711 | FT | 0.51 | 0.71 | 1.78 | 0.24 | −2.02 | N/A |
| VR554824 | FT | 0.42 | 0.85 | 1.47 | 0.92 | −0.54 | −1.85 |
| VR555113 | FT | −0.12 | 0.71 | N/A | N/A | N/A | N/A |
| VR555114 | FT | −0.52 | 0.80 | N/A | N/A | N/A | N/A |
| VR555115 | FT | −0.64 | 0.68 | N/A | N/A | N/A | N/A |
| VR555117 | FT | −0.06 | 0.67 | N/A | N/A | N/A | N/A |
| VR555118 | FT | 0.12 | 0.57 | N/A | N/A | N/A | N/A |
| VR555119 | FT | 0.08 | 0.54 | N/A | N/A | N/A | N/A |
| VR555125 | FT | −0.19 | 0.47 | N/A | N/A | N/A | N/A |
| VR555126 | FT | −0.40 | 0.75 | N/A | N/A | N/A | N/A |
| VR555127 | FT | −0.12 | 0.36 | N/A | N/A | N/A | N/A |
| VR555138 | FT | 0.41 | 0.45 | N/A | N/A | N/A | N/A |
| VR555140 | FT | 2.45 | 0.35 | N/A | N/A | N/A | N/A |
| VR555143 | FT | 0.32 | 0.69 | N/A | N/A | N/A | N/A |
| VR555145 | FT | 2.70 | 0.17 | N/A | N/A | N/A | N/A |
| VR555147 | FT | 1.01 | 0.47 | N/A | N/A | N/A | N/A |
| VR555168 | FT | 1.26 | 0.20 | N/A | N/A | N/A | N/A |
| VR555173 | FT | −0.08 | 0.51 | N/A | N/A | N/A | N/A |
| VR555183 | FT | −0.73 | 0.36 | N/A | N/A | N/A | N/A |

Table 8.C.13 IRT Item Statistics—Written Language, Grade Span Nine and Ten

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Item ID** | **Item Type** | **Item Difficulty b** | **Item Discrimination a** | **D1** | **D2** | **D3** | **D4** |
| VH985069 | OP | 0.29 | 0.47 | N/A | N/A | N/A | N/A |
| VH985070 | OP | 0.82 | 0.29 | N/A | N/A | N/A | N/A |
| VH985071 | OP | 2.17 | 0.37 | N/A | N/A | N/A | N/A |
| VH985072 | OP | 1.09 | 0.26 | N/A | N/A | N/A | N/A |
| VH985073 | OP | 1.70 | 0.34 | N/A | N/A | N/A | N/A |
| VH985075 | OP | 1.33 | 0.18 | N/A | N/A | N/A | N/A |
| VH985076 | OP | −0.34 | 0.35 | N/A | N/A | N/A | N/A |
| VH985077 | OP | 1.13 | 0.25 | N/A | N/A | N/A | N/A |
| VH991765 | OP | 0.80 | 0.24 | N/A | N/A | N/A | N/A |
| VH991766 | OP | 0.10 | 0.36 | N/A | N/A | N/A | N/A |
| VH991767 | OP | 0.51 | 0.32 | N/A | N/A | N/A | N/A |
| VH991768 | OP | 0.40 | 0.58 | N/A | N/A | N/A | N/A |
| VH991771 | OP | 1.31 | 0.39 | N/A | N/A | N/A | N/A |
| VH991772 | OP | 1.89 | 0.21 | N/A | N/A | N/A | N/A |
| VR023983 | OP | −0.48 | 0.56 | 1.09 | −1.09 | N/A | N/A |
| VR023986 | OP | −0.95 | 0.51 | 1.13 | −1.13 | N/A | N/A |
| VR029230 | OP | 0.01 | 0.61 | 0.84 | 1.29 | −0.21 | −1.92 |
| VR029711 | OP | 0.44 | 0.83 | 1.62 | 1.03 | −0.16 | −2.49 |
| VR129251 | OP | 0.07 | 0.68 | 1.08 | 0.41 | −1.50 | N/A |
| VR129252 | OP | −0.38 | 0.52 | 1.55 | −1.55 | N/A | N/A |
| VR135910 | OP | 2.08 | 0.23 | N/A | N/A | N/A | N/A |
| VR135911 | OP | 0.78 | 0.46 | N/A | N/A | N/A | N/A |
| VR135913 | OP | 0.12 | 0.50 | N/A | N/A | N/A | N/A |
| VR292006 | OP | −0.04 | 0.30 | N/A | N/A | N/A | N/A |
| VR292014 | OP | 0.92 | 0.25 | N/A | N/A | N/A | N/A |
| VR292020 | OP | −0.54 | 0.67 | N/A | N/A | N/A | N/A |
| VR292023 | OP | 0.75 | 0.49 | N/A | N/A | N/A | N/A |
| VR292093 | OP | 0.04 | 0.52 | N/A | N/A | N/A | N/A |
| VR292116 | OP | −0.44 | 0.69 | N/A | N/A | N/A | N/A |
| VR292290 | OP | 0.88 | 0.18 | N/A | N/A | N/A | N/A |
| VR292292 | OP | −0.58 | 0.45 | N/A | N/A | N/A | N/A |
| VR292445 | OP | −0.13 | 0.58 | N/A | N/A | N/A | N/A |
| VR029709 | FT | 0.44 | 0.84 | 1.39 | 0.85 | −0.39 | −1.85 |
| VR525905 | FT | 0.47 | 0.29 | N/A | N/A | N/A | N/A |
| VR525910 | FT | 0.09 | 0.54 | N/A | N/A | N/A | N/A |
| VR525912 | FT | −0.18 | 0.89 | N/A | N/A | N/A | N/A |
| VR526555 | FT | 1.09 | 0.21 | N/A | N/A | N/A | N/A |
| VR526558 | FT | 0.10 | 0.38 | N/A | N/A | N/A | N/A |
| VR526569 | FT | 2.09 | 0.30 | N/A | N/A | N/A | N/A |
| VR526594 | FT | 1.61 | 0.27 | N/A | N/A | N/A | N/A |
| VR526596 | FT | 1.45 | 0.35 | N/A | N/A | N/A | N/A |
| VR526597 | FT | 0.19 | 0.39 | N/A | N/A | N/A | N/A |
| VR526598 | FT | 3.17 | 0.23 | N/A | N/A | N/A | N/A |
| VR526599 | FT | 2.01 | 0.39 | N/A | N/A | N/A | N/A |
| VR526600 | FT | 3.04 | 0.18 | N/A | N/A | N/A | N/A |
| VR528964 | FT | 0.88 | 0.40 | 2.01 | −2.01 | N/A | N/A |
| VR528967 | FT | −0.96 | 0.41 | 1.27 | −1.27 | N/A | N/A |
| VR544705 | FT | 0.18 | 0.44 | N/A | N/A | N/A | N/A |
| VR544706 | FT | 0.29 | 0.23 | N/A | N/A | N/A | N/A |
| VR544707 | FT | 0.69 | 0.44 | N/A | N/A | N/A | N/A |
| VR544708 | FT | 4.31 | 0.21 | N/A | N/A | N/A | N/A |
| VR544709 | FT | 5.14 | 0.13 | N/A | N/A | N/A | N/A |
| VR544710 | FT | 1.07 | 0.29 | N/A | N/A | N/A | N/A |
| VR544711 | FT | 1.53 | 0.48 | N/A | N/A | N/A | N/A |
| VR544712 | FT | 0.67 | 0.41 | N/A | N/A | N/A | N/A |
| VR544727 | FT | 0.52 | 0.31 | N/A | N/A | N/A | N/A |
| VR544729 | FT | 0.60 | 0.37 | N/A | N/A | N/A | N/A |
| VR544731 | FT | 24.19 | 0.02 | N/A | N/A | N/A | N/A |

Table 8.C.14 IRT Item Statistics—Written Language, Grade Span Eleven and Twelve

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Item ID** | **Item Type** | **Item Difficulty b** | **Item Discrimination a** | **D1** | **D2** | **D3** | **D4** |
| VH990662 | OP | −1.33 | 0.50 | N/A | N/A | N/A | N/A |
| VH990663 | OP | 1.63 | 0.30 | N/A | N/A | N/A | N/A |
| VH990664 | OP | −0.52 | 0.81 | N/A | N/A | N/A | N/A |
| VH991204 | OP | 1.15 | 0.21 | N/A | N/A | N/A | N/A |
| VH991206 | OP | −0.04 | 0.95 | N/A | N/A | N/A | N/A |
| VH991207 | OP | −0.28 | 0.67 | N/A | N/A | N/A | N/A |
| VR025976 | OP | −0.33 | 0.60 | 0.99 | −0.99 | N/A | N/A |
| VR025979 | OP | −0.93 | 0.51 | 1.21 | −1.21 | N/A | N/A |
| VR029667 | OP | 0.71 | 0.69 | 2.03 | 1.10 | −0.13 | −3.00 |
| VR067820 | OP | 0.74 | 0.29 | N/A | N/A | N/A | N/A |
| VR067823 | OP | 0.15 | 0.55 | N/A | N/A | N/A | N/A |
| VR067825 | OP | 0.36 | 0.55 | N/A | N/A | N/A | N/A |
| VR067835 | OP | 4.47 | 0.15 | N/A | N/A | N/A | N/A |
| VR067847 | OP | 2.81 | 0.38 | N/A | N/A | N/A | N/A |
| VR067852 | OP | 0.90 | 0.43 | N/A | N/A | N/A | N/A |
| VR072917 | OP | −0.07 | 0.69 | 0.98 | 0.65 | −1.63 | N/A |
| VR072918 | OP | −0.80 | 0.77 | 0.46 | −0.46 | N/A | N/A |
| VR134735 | OP | 2.43 | 0.40 | N/A | N/A | N/A | N/A |
| VR134736 | OP | 2.01 | 0.28 | N/A | N/A | N/A | N/A |
| VR134737 | OP | 0.25 | 0.28 | N/A | N/A | N/A | N/A |
| VR134738 | OP | 0.29 | 0.46 | N/A | N/A | N/A | N/A |
| VR134739 | OP | 6.75 | 0.08 | N/A | N/A | N/A | N/A |
| VR134741 | OP | 2.68 | 0.31 | N/A | N/A | N/A | N/A |
| VR289505 | OP | 0.18 | 0.55 | 0.84 | 1.41 | −0.27 | −1.98 |
| VR299375 | OP | 0.24 | 0.37 | N/A | N/A | N/A | N/A |
| VR299520 | OP | −0.11 | 0.51 | N/A | N/A | N/A | N/A |
| VR299522 | OP | 1.19 | 0.26 | N/A | N/A | N/A | N/A |
| VR299523 | OP | −0.02 | 0.33 | N/A | N/A | N/A | N/A |
| VR299538 | OP | 1.76 | 0.17 | N/A | N/A | N/A | N/A |
| VR299539 | OP | −0.07 | 0.28 | N/A | N/A | N/A | N/A |
| VR299540 | OP | 1.76 | 0.41 | N/A | N/A | N/A | N/A |
| VR299541 | OP | 11.37 | 0.04 | N/A | N/A | N/A | N/A |
| VR298769 | FT | 2.11 | 0.36 | N/A | N/A | N/A | N/A |
| VR298855 | FT | −0.23 | 0.58 | N/A | N/A | N/A | N/A |
| VR298863 | FT | 1.12 | 0.34 | N/A | N/A | N/A | N/A |
| VR298875 | FT | 0.18 | 0.54 | N/A | N/A | N/A | N/A |
| VR531165 | FT | 2.70 | 0.30 | N/A | N/A | N/A | N/A |
| VR531166 | FT | 1.80 | 0.44 | N/A | N/A | N/A | N/A |
| VR531167 | FT | 7.02 | 0.07 | N/A | N/A | N/A | N/A |
| VR531168 | FT | 1.11 | 0.30 | N/A | N/A | N/A | N/A |
| VR531169 | FT | 1.61 | 0.30 | N/A | N/A | N/A | N/A |
| VR531170 | FT | 3.20 | 0.19 | N/A | N/A | N/A | N/A |
| VR531194 | FT | −0.71 | 0.70 | N/A | N/A | N/A | N/A |
| VR531195 | FT | 0.40 | 0.57 | N/A | N/A | N/A | N/A |
| VR531196 | FT | 0.57 | 0.56 | N/A | N/A | N/A | N/A |
| VR531197 | FT | 3.58 | 0.13 | N/A | N/A | N/A | N/A |
| VR531198 | FT | 7.89 | 0.14 | N/A | N/A | N/A | N/A |
| VR531199 | FT | 0.20 | 0.54 | N/A | N/A | N/A | N/A |
| VR544901 | FT | −0.21 | 0.40 | N/A | N/A | N/A | N/A |
| VR544906 | FT | −0.70 | 0.76 | N/A | N/A | N/A | N/A |
| VR544907 | FT | −0.14 | 0.81 | N/A | N/A | N/A | N/A |
| VR544924 | FT | 4.79 | 0.11 | N/A | N/A | N/A | N/A |
| VR544929 | FT | 3.30 | 0.14 | N/A | N/A | N/A | N/A |
| VR544932 | FT | 0.62 | 0.33 | N/A | N/A | N/A | N/A |
| VR544933 | FT | 2.45 | 0.25 | N/A | N/A | N/A | N/A |
| VR544935 | FT | 1.44 | 0.42 | N/A | N/A | N/A | N/A |
| VR545606 | FT | −0.55 | 0.53 | 1.24 | −1.24 | N/A | N/A |
| VR545610 | FT | −0.86 | 0.48 | 1.09 | −1.09 | N/A | N/A |
| VR545616 | FT | 0.59 | 0.81 | 1.19 | 1.09 | −0.40 | −1.88 |

Table 8.C.15 Distribution of *a*-values—Oral Language Composites

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **IRT *a*-value** | **Kindergarten Listening** | **Kindergarten Speaking** | **Grade 1 Listening** | **Grade 1 Speaking** | **Grade 2 Listening** | **Grade 2 Speaking** | **Grade Span 3–5 Listening** | **Grade Span 3–5 Speaking** | **Grade Span 6–8 Listening** | **Grade Span 6–8 Speaking** | **Grade Span 9–10 Listening** | **Grade Span 9–10 Speaking** | **Grade Span 11–12 Listening** | **Grade Span 11–12 Speaking** |
| 0.0–< 0.2 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 2 | 0 | 7 | 0 | 6 | 0 |
| 0.2–< 0.4 | 3 | 0 | 6 | 0 | 9 | 0 | 11 | 0 | 15 | 0 | 14 | 0 | 14 | 0 |
| 0.4–< 0.6 | 7 | 0 | 11 | 0 | 7 | 2 | 7 | 0 | 4 | 1 | 1 | 5 | 2 | 6 |
| 0.6–< 0.8 | 8 | 0 | 2 | 0 | 3 | 1 | 2 | 7 | 1 | 10 | 0 | 5 | 0 | 3 |
| 0.8–< 1.0 | 2 | 3 | 2 | 0 | 2 | 4 | 0 | 3 | 0 | 0 | 0 | 1 | 0 | 1 |
| 1.0–< 1.2 | 0 | 1 | 1 | 6 | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 1 | 0 | 1 |
| 1.2–< 1.4 | 0 | 3 | 0 | 2 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 1.4–< 1.6 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1.6–< 1.8 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1.8–< 2.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2.0–< + | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Table 8.C.16 Distribution of *b*–values—Oral Language Composites

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **IRT *b*-value** | **Kindergarten Listening** | **Kindergarten Speaking** | **Grade 1 Listening** | **Grade 1 Speaking** | **Grade 2 Listening** | **Grade 2 Speaking** | **Grade Span 3–5 Listening** | **Grade Span 3–5 Speaking** | **Grade Span 6–8 Listening** | **Grade Span 6–8 Speaking** | **Grade Span 9–10 Listening** | **Grade Span 9–10 Speaking** | **Grade Span 11–12 Listening** | **Grade Span 11–12 Speaking** |
| < −6.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| −6.0–< −5.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| −5.8–< −5.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| −5.6–< −5.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| −5.4–< −5.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| −5.2–< −5.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| −5.0–< −4.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| −4.8–< −4.6 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| −4.6–< −4.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| −4.4–< −4.2 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| −4.2–< −4.0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| −4.0–< −3.8 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| −3.8–< −3.6 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 |
| −3.6–< −3.4 | 0 | 3 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| −3.4–< −3.2 | 2 | 1 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| −3.2–< −3.0 | 0 | 2 | 2 | 1 | 2 | 2 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| −3.0–< −2.8 | 2 | 0 | 2 | 3 | 2 | 1 | 4 | 0 | 1 | 0 | 2 | 1 | 0 | 1 |
| −2.8–< −2.6 | 3 | 0 | 0 | 2 | 1 | 2 | 0 | 2 | 0 | 1 | 0 | 1 | 1 | 1 |
| −2.6–< −2.4 | 0 | 0 | 1 | 0 | 2 | 1 | 3 | 1 | 2 | 2 | 0 | 0 | 0 | 0 |
| −2.4–< −2.2 | 1 | 0 | 0 | 0 | 3 | 1 | 1 | 0 | 3 | 0 | 1 | 1 | 0 | 2 |
| −2.2–< −2.0 | 1 | 0 | 2 | 0 | 1 | 1 | 2 | 2 | 2 | 2 | 1 | 2 | 0 | 0 |
| −2.0–< −1.8 | 4 | 2 | 3 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 3 | 1 | 1 | 0 |
| −1.8–< −1.6 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 2 | 3 | 0 | 0 | 1 | 2 | 2 |
| −1.6–< −1.4 | 1 | 1 | 2 | 0 | 2 | 0 | 1 | 3 | 0 | 0 | 3 | 3 | 2 | 1 |
| −1.4–< −1.2 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 2 | 1 |
| −1.2–< −1.0 | 0 | 0 | 0 | 0 | 3 | 1 | 1 | 1 | 0 | 2 | 0 | 0 | 1 | 1 |
| −1.0–< −0.8 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 2 | 1 | 0 | 0 | 1 | 1 |
| −0.8–< −0.6 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 1 |
| −0.6–< −0.4 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 0 |
| −0.4–< −0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 2 | 1 | 0 | 3 | 1 |
| −0.2–< 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| 0.0–< 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| 0.2–< 0.4 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 0 |
| 0.4–< 0.6 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0.6–< 0.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 |
| 0.8–< 1.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| 1.0–< 1.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1.2–< 1.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 1.4–< 1.6 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1.6–< 1.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1.8–< 2.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2.0–< 2.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2.2–< 2.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| 2.4–< 2.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| 2.6–< 2.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2.8–< 3.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3.0–< 4.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4.0–< 5.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5.0–< 6.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6.0–< + | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Table 8.C.17 Distribution of *a*-values—Written Language Composites

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **IRT *a*-value** | **Kindergarten Reading** | **Kindergarten Writing** | **Grade 1 Reading** | **Grade 1 Writing** | **Grade 2 Reading** | **Grade 2 S Writing** | **Grade Span 3–5 Reading** | **Grade Span 3–5 Writing** | **Grade Span 6–8 Reading** | **Grade Span 6–8 Writing** | **Grade Span 9–10 Reading** | **Grade Span 9–10 Writing** | **Grade Span 11–12 Reading** | **Grade Span 11–12 Writing** |
| 0.0–< 0.2 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 4 | 0 |
| 0.2–< 0.4 | 2 | 0 | 0 | 0 | 1 | 0 | 10 | 0 | 10 | 0 | 14 | 0 | 12 | 0 |
| 0.4–< 0.6 | 8 | 0 | 0 | 2 | 5 | 1 | 5 | 0 | 12 | 2 | 8 | 3 | 7 | 2 |
| 0.6–< 0.8 | 2 | 0 | 5 | 1 | 7 | 2 | 5 | 4 | 4 | 3 | 2 | 2 | 1 | 4 |
| 0.8–< 1.0 | 0 | 0 | 12 | 2 | 4 | 2 | 3 | 0 | 0 | 1 | 0 | 1 | 2 | 0 |
| 1.0–< 1.2 | 0 | 2 | 4 | 2 | 2 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1.2–< 1.4 | 2 | 0 | 0 | 0 | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1.4–< 1.6 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1.6–< 1.8 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1.8–< 2.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2.0–< + | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Table 8.C.18 Distribution of *b*-values—Written Language Composites

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **IRT *b*-value** | **Kindergarten Reading** | **Kindergarten Writing** | **Grade 1 Reading** | **Grade 1 Writing** | **Grade 2 Reading** | **Grade 2 S Writing** | **Grade Span 3–5 Reading** | **Grade Span 3–5 Writing** | **Grade Span 6–8 Reading** | **Grade Span 6–8 Writing** | **Grade Span 9–10 Reading** | **Grade Span 9–10 Writing** | **Grade Span 11–12 Reading** | **Grade Span 11–12 Writing** |
| < −6.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| −6.0–< −5.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| −5.8–< −5.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| −5.6–< −5.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| −5.4–< −5.2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| −5.2–< −5.0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| −5.0–< −4.8 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| −4.8–< −4.6 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| −4.6–< −4.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| −4.4–< −4.2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| −4.2–< −4.0 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| −4.0–< −3.8 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| −3.8–< −3.6 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| −3.6–< −3.4 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| −3.4–< −3.2 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| −3.2–< −3.0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| −3.0–< −2.8 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| −2.8–< −2.6 | 0 | 0 | 3 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| −2.6–< −2.4 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| −2.4–< −2.2 | 0 | 0 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| −2.2–< −2.0 | 0 | 0 | 3 | 1 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| −2.0–< −1.8 | 0 | 0 | 3 | 2 | 4 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| −1.8–< −1.6 | 0 | 0 | 1 | 0 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| −1.6–< −1.4 | 0 | 0 | 3 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| −1.4–< −1.2 | 0 | 0 | 0 | 0 | 3 | 1 | 1 | 2 | 1 | 1 | 0 | 0 | 1 | 0 |
| −1.2–< −1.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| −1.0–< −0.8 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 1 | 0 | 1 | 0 | 2 |
| −0.8–< −0.6 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| −0.6–< −0.4 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 1 | 0 | 3 | 1 | 1 | 0 |
| −0.4–< −0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 1 | 1 | 1 | 1 | 1 |
| −0.2–< 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 0 | 2 | 0 | 4 | 1 |
| 0.0–< 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 5 | 1 | 3 | 2 | 1 | 1 |
| 0.2–< 0.4 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 1 | 1 | 0 | 4 | 0 |
| 0.4–< 0.6 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 1 | 0 | 0 |
| 0.6–< 0.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 3 | 0 | 1 | 1 |
| 0.8–< 1.0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 3 | 0 | 1 | 0 |
| 1.0–< 1.2 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 2 | 0 | 2 | 0 |
| 1.2–< 1.4 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 2 | 0 | 0 | 0 |
| 1.4–< 1.6 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1.6–< 1.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 3 | 0 |
| 1.8–< 2.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
| 2.0–< 2.2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 0 | 1 | 0 |
| 2.2–< 2.4 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2.4–< 2.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 2.6–< 2.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 2.8–< 3.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 3.0–< 4.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| 4.0–< 5.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 5.0–< 6.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6.0–< + | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |

**Notes:**

* The test characteristic curve (TCC) in figure 8.C.1 uses the following abbreviations:
* G/GS\_KN = Kindergarten
* G/GS\_01 = Grade one
* G/GS\_02 = Grade two
* G/GS\_03 = Grade span three through five
* G/GS\_06 = Grade span six through eight
* G/GS\_09 = Grade span nine and ten
* G/GS\_11 = Grade span eleven and twelve
* In table 8.C.19, “N/A” indicates that the scaled scores were beyond the maximum scaled scores of the grade level or grade span.

Figure 8.C.1 displays the TCCs in the reporting scale metric for the oral language vertical scale. The vertical axis shows the percent of maximum possible score from 0 to 100 in intervals of 10. The horizontal axis shows corresponding scale score values from 1150 to 1950 in intervals of 25.

The lines describing expected percentages of correct responses are ordered from left to right, corresponding to kindergarten to grade span eleven and twelve for oral language. The lines describing expected percentages of correct responses are separated more widely at the lower grade levels, with diminishing amounts of change in the upper grade levels for oral language scales. The properties of the vertical scale are consistent with the previous Summative ELPAC operational assessment in 2021–22, which show increasing difficulty from grade level to grade level, with lines moving from left to right in figure 8.C.1.

Figure 8.C.1 shows the TCC for the oral language composite scores at each grade level or grade span. The curves in figure 8.C.1 are derived from the data in table 8.C.19.

Figure 8.C.1 Oral language composite TCCs

Table 8.C.19 Oral Language Composite Test Characteristic Curves Data for Figure 8.C.1

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Scale** | **K** | **G 1** | **G 2** | **G 3–5** | **G 6–8** | **G 9–10** | **G 11–12** |
| 1150 | 0.2 | 0.9 | 0.5 | 1.1 | 1.7 | 3.2 | 2.1 |
| 1175 | 0.3 | 1.2 | 0.7 | 1.5 | 2.2 | 3.9 | 2.5 |
| 1200 | 0.5 | 1.6 | 1.0 | 2.1 | 2.8 | 4.8 | 3.2 |
| 1225 | 0.9 | 2.2 | 1.4 | 2.8 | 3.7 | 5.9 | 4.0 |
| 1250 | 1.6 | 3.2 | 2.2 | 3.9 | 4.8 | 7.2 | 5.1 |
| 1275 | 3.0 | 4.9 | 3.5 | 5.5 | 6.4 | 9.0 | 6.6 |
| 1300 | 5.8 | 7.9 | 5.9 | 7.9 | 8.5 | 11.3 | 8.7 |
| 1325 | 11.1 | 13.0 | 10.0 | 11.4 | 11.5 | 14.5 | 11.8 |
| 1350 | 20.1 | 21.2 | 16.9 | 16.8 | 15.8 | 18.9 | 16.3 |
| 1375 | 32.7 | 32.8 | 27.9 | 25.0 | 22.2 | 25.3 | 22.8 |
| 1400 | 48.3 | 47.1 | 42.6 | 36.5 | 31.3 | 33.9 | 31.2 |
| 1425 | 63.5 | 61.1 | 57.3 | 49.9 | 42.4 | 44.3 | 41.3 |
| 1450 | 75.1 | 72.0 | 69.0 | 62.0 | 53.6 | 55.0 | 51.7 |
| 1475 | 83.7 | 79.9 | 77.7 | 71.6 | 63.5 | 64.5 | 61.3 |
| 1500 | 89.9 | 86.0 | 84.2 | 79.2 | 71.8 | 72.2 | 69.5 |
| 1525 | 93.7 | 90.8 | 89.1 | 85.1 | 78.7 | 78.2 | 76.2 |
| 1550 | 95.9 | 94.1 | 92.8 | 89.6 | 84.2 | 82.8 | 81.5 |
| 1575 | 97.2 | 96.3 | 95.3 | 92.8 | 88.6 | 86.3 | 85.6 |
| 1600 | 98.0 | 97.6 | 97.0 | 94.8 | 91.7 | 89.1 | 88.8 |
| 1625 | 98.6 | 98.4 | 98.0 | 96.1 | 94.0 | 91.2 | 91.2 |
| 1650 | 99.0 | 98.9 | 98.6 | 97.0 | 95.6 | 92.8 | 93.0 |
| 1675 | 99.3 | 99.2 | 99.0 | 97.6 | 96.6 | 94.0 | 94.4 |
| 1700 | 99.5 | 99.5 | 99.3 | 98.1 | 97.4 | 94.9 | 95.4 |
| 1725 | N/A | N/A | N/A | 98.4 | 97.9 | 95.6 | 96.2 |
| 1750 | N/A | N/A | N/A | 98.7 | 98.3 | 96.2 | 96.9 |
| 1775 | N/A | N/A | N/A | 98.9 | 98.6 | 96.7 | 97.4 |
| 1800 | N/A | N/A | N/A | 99.1 | 98.9 | 97.2 | 97.8 |
| 1825 | N/A | N/A | N/A | N/A | 99.1 | 97.5 | 98.1 |
| 1850 | N/A | N/A | N/A | N/A | 99.2 | 97.8 | 98.4 |
| 1875 | N/A | N/A | N/A | N/A | 99.3 | 98.1 | 98.6 |
| 1900 | N/A | N/A | N/A | N/A | 99.4 | 98.3 | 98.8 |
| 1925 | N/A | N/A | N/A | N/A | N/A | 98.5 | 99.0 |
| 1950 | N/A | N/A | N/A | N/A | N/A | 98.7 | 99.1 |

**Notes:**

* The TCC in figure 8.C.2 uses the following abbreviations:
* G/GS\_KN = Kindergarten
* G/GS\_01 = Grade one
* G/GS\_02 = Grade two
* G/GS\_03 = Grade span three through five
* G/GS\_06 = Grade span six through eight
* G/GS\_09 = Grade span nine and ten
* G/GS\_11 = Grade span eleven and twelve
* In table 8.C.20, “N/A” indicates that the scaled scores were beyond the maximum scaled scores of the grade level or grade span.

Figure 8.C.2 displays the TCCs in the reporting scale metric for the written language vertical scale. The vertical axis shows the percent of maximum possible score from 0 to 100 in intervals of 10. The horizontal axis shows corresponding scale score values from 1150 to 1950 in intervals of 25.

The lines describing expected percentages of correct responses are ordered from left to right, corresponding to kindergarten to grade span eleven and twelve for written language. The lines describing expected percentages of correct responses are separated more widely at the lower grade levels, with diminishing amounts of change in the upper grade levels for written language scales. The properties of the vertical scale are consistent with the previous Summative ELPAC operational assessment in 2021–22, which show increasing difficulty from grade level to grade level, with lines moving from left to right in figure 8.C.2.

Figure 8.C.2 shows the TCC for the written language composite scores at each grade level or grade span. The curves in figure 8.C.2 are derived from the data in table 8.C.20.

Figure 8.C.2 Written language composite TCCs

Table 8.C.20 Written Language Composite Test Characteristic Curves Data for Figure 8.C.2

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Scale** | **K** | **G 1** | **G 2** | **G 3–5** | **G 6–8** | **G 9–10** | **G 11–12** |
| 1150 | 0.9 | 0.0 | 0.2 | 0.4 | 0.2 | 0.4 | 0.8 |
| 1175 | 1.5 | 0.0 | 0.3 | 0.4 | 0.2 | 0.5 | 0.9 |
| 1200 | 2.5 | 0.1 | 0.4 | 0.6 | 0.3 | 0.7 | 1.1 |
| 1225 | 4.1 | 0.2 | 0.5 | 0.7 | 0.5 | 0.9 | 1.3 |
| 1250 | 6.8 | 0.4 | 0.8 | 0.9 | 0.7 | 1.3 | 1.6 |
| 1275 | 11.4 | 0.8 | 1.3 | 1.2 | 1.0 | 1.7 | 2.0 |
| 1300 | 19.2 | 1.9 | 2.1 | 1.7 | 1.6 | 2.4 | 2.7 |
| 1325 | 30.1 | 4.2 | 3.6 | 2.4 | 2.4 | 3.4 | 3.6 |
| 1350 | 44.9 | 8.9 | 6.5 | 3.7 | 3.8 | 4.9 | 4.9 |
| 1375 | 65.8 | 18.3 | 12.3 | 6.1 | 6.0 | 7.0 | 6.9 |
| 1400 | 83.3 | 33.9 | 23.4 | 10.5 | 9.6 | 10.2 | 9.8 |
| 1425 | 92.5 | 53.8 | 40.6 | 18.0 | 15.1 | 15.0 | 14.3 |
| 1450 | 96.4 | 72.0 | 59.6 | 28.5 | 23.2 | 22.0 | 21.0 |
| 1475 | 98.1 | 85.0 | 74.5 | 40.8 | 33.6 | 31.3 | 30.2 |
| 1500 | 98.9 | 92.9 | 84.6 | 53.3 | 45.2 | 42.2 | 41.0 |
| 1525 | 99.3 | 96.9 | 91.1 | 64.3 | 56.6 | 53.0 | 51.5 |
| 1550 | 99.6 | 98.6 | 94.8 | 72.9 | 66.9 | 62.9 | 60.7 |
| 1575 | 99.7 | 99.4 | 96.8 | 79.5 | 75.4 | 71.4 | 68.5 |
| 1600 | 99.8 | 99.7 | 97.9 | 84.7 | 82.1 | 78.4 | 75.0 |
| 1625 | 99.9 | 99.9 | 98.5 | 88.7 | 87.4 | 84.1 | 80.3 |
| 1650 | 99.9 | 99.9 | 98.9 | 91.6 | 91.3 | 88.4 | 84.6 |
| 1675 | 100.0 | 100.0 | 99.2 | 93.6 | 94.0 | 91.6 | 87.9 |
| 1700 | 100.0 | 100.0 | 99.4 | 95.0 | 95.9 | 93.9 | 90.5 |
| 1725 | N/A | N/A | N/A | 95.9 | 97.1 | 95.5 | 92.4 |
| 1750 | N/A | N/A | N/A | 96.7 | 97.9 | 96.7 | 93.8 |
| 1775 | N/A | N/A | N/A | 97.2 | 98.4 | 97.5 | 94.8 |
| 1800 | N/A | N/A | N/A | 97.7 | 98.8 | 98.1 | 95.6 |
| 1825 | N/A | N/A | N/A | N/A | 99.1 | 98.6 | 96.1 |
| 1850 | N/A | N/A | N/A | N/A | 99.3 | 98.9 | 96.6 |
| 1875 | N/A | N/A | N/A | N/A | 99.5 | 99.1 | 96.9 |
| 1900 | N/A | N/A | N/A | N/A | 99.6 | 99.3 | 97.2 |
| 1925 | N/A | N/A | N/A | N/A | N/A | 99.5 | 97.4 |
| 1950 | N/A | N/A | N/A | N/A | N/A | 99.6 | 97.6 |

### Appendix 8.D: Response Time Results

**Notes:**

* Overall scale scores were used to classify students.
* While the Writing domain contributes to overall scale scores in all grade levels, testing time does not include Writing in kindergarten through grade two because these assessments are administered in paper–pencil format.
* All students who completed the assessment and have an unrounded test time greater than zero (0) are included.
* Grade levels reflect students’ enrolled grade levels during the 2022–23 school year.
* Response time percentiles are identified as follows:
* “% Pt. 1” is the time taken by test takers in the first percentile of response time.
* “% Pt. 10” is the time taken by test takers in the tenth percentile of response time.
* “% Pt. 25” is the time taken by test takers in the twenty-fifth percentile of response time.
* “% Pt. 50” is the time taken by test takers in the fiftieth percentile of response time.
* “% Pt. 75” is the time taken by test takers in the seventy-fifth percentile of response time.
* “% Pt. 90” is the time taken by test takers in the ninetieth percentile of response time.
* “% Pt. 99” is the time taken by test takers in the ninety-ninth percentile of response time.

Table 8.D.1 Total Testing Time (in Minutes) at Each Scale Score Interval

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Grade Level or Grade Span** | **Overall Scale Score Interval** | **N** | **Mean** | **SD** | **Min.** | **Max.** | **% Pt. 1** | **% Pt. 10** | **% Pt. 25** | **% Pt. 50** | **% Pt. 75** | **% Pt. 90** | **% Pt. 99** |
| Kindergarten | 1150–1386 | 31,427 | 25.60 | 10.44 | 1.07 | 165.85 | 5.04 | 12.79 | 18.80 | 25.30 | 31.29 | 37.62 | 57.24 |
| Kindergarten | 1387–1418 | 31,713 | 30.91 | 8.49 | 5.19 | 166.01 | 17.60 | 22.57 | 25.58 | 29.43 | 34.28 | 40.54 | 61.61 |
| Kindergarten | 1419–1455 | 31,645 | 30.57 | 8.15 | 4.97 | 133.06 | 18.40 | 22.78 | 25.50 | 29.05 | 33.67 | 39.66 | 60.75 |
| Kindergarten | 1456–1700 | 30,682 | 29.86 | 8.20 | 5.51 | 191.02 | 18.11 | 22.25 | 24.88 | 28.27 | 32.76 | 38.79 | 60.40 |
| 1 | 1150–1418 | 21,596 | 31.74 | 14.15 | 0.48 | 166.62 | 4.34 | 14.29 | 24.27 | 30.62 | 38.26 | 48.12 | 77.05 |
| 1 | 1419–1447 | 21,704 | 43.37 | 14.93 | 2.45 | 213.66 | 22.71 | 28.83 | 33.45 | 40.35 | 49.28 | 61.00 | 95.99 |
| 1 | 1448–1475 | 21,531 | 46.07 | 14.91 | 3.76 | 386.52 | 24.72 | 32.00 | 36.63 | 42.92 | 51.78 | 63.58 | 99.30 |
| 1 | 1476–1700 | 21,283 | 44.20 | 13.61 | 6.01 | 211.43 | 26.09 | 31.88 | 35.69 | 41.07 | 48.82 | 59.97 | 94.93 |
| 2 | 1150–1445 | 23,159 | 44.91 | 17.14 | 0.63 | 198.88 | 7.86 | 27.54 | 34.94 | 42.86 | 52.59 | 64.90 | 100.96 |
| 2 | 1446–1475 | 22,285 | 52.69 | 16.22 | 7.54 | 287.16 | 28.34 | 37.19 | 42.56 | 49.35 | 58.83 | 71.78 | 109.68 |
| 2 | 1476–1505 | 22,262 | 52.32 | 15.62 | 13.03 | 321.50 | 29.92 | 37.98 | 42.67 | 49.07 | 57.92 | 70.35 | 108.55 |
| 2 | 1506–1700 | 22,405 | 50.05 | 14.21 | 8.53 | 221.71 | 29.80 | 36.74 | 41.19 | 47.03 | 55.13 | 66.62 | 100.40 |
| 3–5 | 1150–1473 | 70,167 | 97.57 | 43.09 | 4.45 | 899.87 | 28.41 | 53.40 | 69.56 | 90.19 | 116.37 | 149.87 | 242.92 |
| 3–5 | 1474–1506 | 68,673 | 111.88 | 42.32 | 21.34 | 1132.99 | 50.98 | 69.85 | 83.80 | 103.33 | 129.43 | 163.17 | 259.74 |
| 3–5 | 1507–1539 | 68,283 | 113.80 | 42.35 | 28.01 | 1569.80 | 55.68 | 73.02 | 86.11 | 104.82 | 130.48 | 164.73 | 263.80 |
| 3–5 | 1540–1800 | 67,694 | 114.49 | 43.59 | 23.47 | 1534.84 | 57.74 | 74.20 | 86.69 | 105.13 | 131.15 | 164.35 | 264.72 |
| 6–8 | 1150–1501 | 49,573 | 100.83 | 50.59 | 2.59 | 1171.11 | 25.48 | 50.58 | 68.05 | 91.36 | 121.84 | 160.58 | 273.26 |
| 6–8 | 1502–1538 | 48,843 | 118.39 | 52.06 | 13.64 | 1309.04 | 46.82 | 68.72 | 84.47 | 107.20 | 138.56 | 180.84 | 301.03 |
| 6–8 | 1539–1576 | 49,296 | 126.04 | 54.32 | 29.34 | 845.78 | 54.39 | 74.82 | 90.68 | 113.92 | 146.58 | 190.15 | 321.26 |
| 6–8 | 1577–1900 | 48,878 | 131.23 | 60.56 | 16.50 | 1078.75 | 57.77 | 77.39 | 93.18 | 117.00 | 151.58 | 198.57 | 351.59 |
| 9–10 | 1150–1498 | 28,253 | 97.29 | 49.84 | 2.61 | 1207.61 | 21.47 | 44.75 | 63.23 | 88.87 | 120.84 | 158.10 | 260.67 |
| 9–10 | 1499–1545 | 28,273 | 111.02 | 51.18 | 13.81 | 997.75 | 40.69 | 61.22 | 77.07 | 100.47 | 131.91 | 172.16 | 288.55 |
| 9–10 | 1546–1586 | 28,194 | 118.77 | 50.19 | 31.82 | 769.00 | 51.29 | 70.55 | 85.28 | 107.84 | 139.05 | 179.35 | 289.43 |
| 9–10 | 1587–1950 | 28,162 | 125.91 | 53.12 | 32.04 | 840.96 | 55.48 | 75.63 | 90.63 | 113.64 | 146.97 | 189.52 | 317.69 |
| 11–12 | 1150–1503 | 21,498 | 94.98 | 49.80 | 1.91 | 764.91 | 17.58 | 41.17 | 61.07 | 86.71 | 119.46 | 156.51 | 255.50 |
| 11–12 | 1504–1550 | 22,153 | 103.88 | 48.78 | 16.96 | 683.76 | 34.38 | 55.05 | 70.66 | 93.73 | 125.07 | 164.29 | 272.84 |
| 11–12 | 1551–1593 | 20,753 | 111.80 | 48.42 | 15.00 | 793.52 | 45.95 | 64.37 | 79.27 | 101.50 | 133.15 | 170.35 | 280.97 |
| 11–12 | 1594–1950 | 21,313 | 120.43 | 52.26 | 29.39 | 969.21 | 51.97 | 70.96 | 86.04 | 108.89 | 141.09 | 182.15 | 304.18 |

### Appendix 8.E: Reliability Estimates

Table 8.E.1 Correlations Between Domains—Kindergarten

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Domain** | **Listening** | **Speaking** | **Reading** | **Writing** |
| Listening | 1.00 | - | - | - |
| Speaking | 0.69 | 1.00 | - | - |
| Reading | 0.75 | 0.71 | 1.00 | - |
| Writing | 0.54 | 0.53 | 0.71 | 1.00 |

Table 8.E.2 Correlations Between Domains—Grade One

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Domain** | **Listening** | **Speaking** | **Reading** | **Writing** |
| Listening | 1.00 | - | - | - |
| Speaking | 0.64 | 1.00 | - | - |
| Reading | 0.48 | 0.49 | 1.00 | - |
| Writing | 0.49 | 0.55 | 0.75 | 1.00 |

Table 8.E.3 Correlations Between Domains—Grade Two

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Domain** | **Listening** | **Speaking** | **Reading** | **Writing** |
| Listening | 1.00 | - | - | - |
| Speaking | 0.66 | 1.00 | - | - |
| Reading | 0.53 | 0.53 | 1.00 | - |
| Writing | 0.49 | 0.56 | 0.75 | 1.00 |

Table 8.E.4 Correlations Between Domains—Grade Span Three Through Five

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Domain** | **Listening** | **Speaking** | **Reading** | **Writing** |
| Listening | 1.00 | - | - | - |
| Speaking | 0.64 | 1.00 | - | - |
| Reading | 0.58 | 0.48 | 1.00 | - |
| Writing | 0.60 | 0.61 | 0.70 | 1.00 |

Table 8.E.5 Correlations Between Domains—Grade Span Six Through Eight

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Domain** | **Listening** | **Speaking** | **Reading** | **Writing** |
| Listening | 1.00 | - | - | - |
| Speaking | 0.64 | 1.00 | - | - |
| Reading | 0.67 | 0.50 | 1.00 | - |
| Writing | 0.67 | 0.67 | 0.66 | 1.00 |

Table 8.E.6 Correlations Between Domains—Grade Span Nine and Ten

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Domain** | **Listening** | **Speaking** | **Reading** | **Writing** |
| Listening | 1.00 | - | - | - |
| Speaking | 0.66 | 1.00 | - | - |
| Reading | 0.68 | 0.52 | 1.00 | - |
| Writing | 0.70 | 0.74 | 0.66 | 1.00 |

Table 8.E.7 Correlations Between Domains—Grade Span Eleven and Twelve

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Domain** | **Listening** | **Speaking** | **Reading** | **Writing** |
| Listening | 1.00 | - | - | - |
| Speaking | 0.60 | 1.00 | - | - |
| Reading | 0.70 | 0.48 | 1.00 | - |
| Writing | 0.69 | 0.71 | 0.63 | 1.00 |

Table 8.E.8 Reliability Coefficient Alpha—Domain, Composite, and Overall Scores

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Grade Level** | **N** | **Listening Alpha** | **Speaking Alpha** | **Reading Alpha** | **Writing Alpha** | **Oral Language Composite Alpha** | **Written Language Composite Alpha** | **Overall Score Alpha** |
| Kindergarten | 131,168 | 0.84 | 0.87 | 0.85 | 0.91 | 0.90 | 0.92 | 0.94 |
| 1 | 88,817 | 0.72 | 0.85 | 0.89 | 0.88 | 0.85 | 0.92 | 0.93 |
| 2 | 92,345 | 0.75 | 0.84 | 0.89 | 0.89 | 0.87 | 0.92 | 0.93 |
| 3 | 97,542 | 0.74 | 0.87 | 0.78 | 0.86 | 0.87 | 0.87 | 0.92 |
| 4 | 93,922 | 0.75 | 0.87 | 0.82 | 0.86 | 0.88 | 0.89 | 0.92 |
| 5 | 89,090 | 0.77 | 0.87 | 0.84 | 0.85 | 0.88 | 0.89 | 0.93 |
| 6 | 75,642 | 0.77 | 0.87 | 0.80 | 0.85 | 0.88 | 0.87 | 0.92 |
| 7 | 65,945 | 0.80 | 0.88 | 0.83 | 0.85 | 0.90 | 0.88 | 0.93 |
| 8 | 60,178 | 0.82 | 0.89 | 0.85 | 0.85 | 0.91 | 0.89 | 0.94 |
| 9 | 59,790 | 0.80 | 0.90 | 0.81 | 0.86 | 0.91 | 0.88 | 0.94 |
| 10 | 56,993 | 0.81 | 0.91 | 0.83 | 0.85 | 0.91 | 0.88 | 0.94 |
| 11 | 49,241 | 0.81 | 0.90 | 0.80 | 0.86 | 0.90 | 0.87 | 0.94 |
| 12 | 39,474 | 0.82 | 0.90 | 0.81 | 0.86 | 0.90 | 0.87 | 0.94 |

**Note:** In table 8.E.9 through table 8.E.21, “N/A” indicates that reliability indices were not calculated for student groups containing 30 or fewer students.

Table 8.E.9 Reliability Estimates by Student Group—Kindergarten

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Student Group** | **N** | **Listening Alpha** | **Speaking Alpha** | **Reading Alpha** | **Writing Alpha** | **Oral Language Composite Alpha** | **Written Language Composite Alpha** | **Overall Score Alpha** |
| Male | 67,672 | 0.84 | 0.87 | 0.86 | 0.91 | 0.90 | 0.92 | 0.94 |
| Female | 63,486 | 0.83 | 0.87 | 0.84 | 0.91 | 0.89 | 0.92 | 0.94 |
| Nonbinary | 10 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| American Indian or Alaska Native | 242 | 0.84 | 0.86 | 0.85 | 0.91 | 0.90 | 0.92 | 0.94 |
| Asian | 19,209 | 0.85 | 0.85 | 0.85 | 0.90 | 0.89 | 0.92 | 0.94 |
| Native Hawaiian or Other Pacific Islander | 314 | 0.80 | 0.81 | 0.82 | 0.91 | 0.85 | 0.91 | 0.92 |
| Filipino | 843 | 0.83 | 0.82 | 0.85 | 0.91 | 0.87 | 0.92 | 0.93 |
| Hispanic or Latino | 100,050 | 0.83 | 0.87 | 0.85 | 0.91 | 0.90 | 0.92 | 0.94 |
| Black or African American | 678 | 0.83 | 0.84 | 0.86 | 0.91 | 0.89 | 0.92 | 0.93 |
| White | 7,474 | 0.86 | 0.87 | 0.86 | 0.91 | 0.91 | 0.93 | 0.94 |
| Two or more races | 2,358 | 0.86 | 0.87 | 0.87 | 0.92 | 0.91 | 0.93 | 0.95 |
| Economically disadvantaged | 117,946 | 0.84 | 0.86 | 0.85 | 0.91 | 0.89 | 0.92 | 0.94 |
| Not economically disadvantaged | 13,222 | 0.84 | 0.90 | 0.86 | 0.92 | 0.91 | 0.93 | 0.94 |
| Reported disabilities | 27,315 | 0.86 | 0.87 | 0.87 | 0.92 | 0.90 | 0.93 | 0.94 |
| No reported disabilities | 103,853 | 0.83 | 0.87 | 0.84 | 0.91 | 0.90 | 0.92 | 0.94 |
| Migrant education | 2,470 | 0.83 | 0.90 | 0.85 | 0.91 | 0.91 | 0.92 | 0.94 |
| Not migrant education | 128,698 | 0.84 | 0.87 | 0.85 | 0.91 | 0.90 | 0.92 | 0.94 |
| Armed forces family member | 910 | 0.83 | 0.84 | 0.83 | 0.91 | 0.88 | 0.92 | 0.93 |
| Not armed forces family member | 130,258 | 0.84 | 0.87 | 0.85 | 0.91 | 0.90 | 0.92 | 0.94 |
| Homeless | 6,916 | 0.83 | 0.90 | 0.86 | 0.91 | 0.91 | 0.92 | 0.94 |
| Not homeless | 124,252 | 0.84 | 0.87 | 0.85 | 0.91 | 0.90 | 0.92 | 0.94 |
| Foster youth | 421 | 0.83 | 0.85 | 0.85 | 0.93 | 0.89 | 0.93 | 0.93 |
| Not foster youth | 130,747 | 0.84 | 0.87 | 0.85 | 0.91 | 0.90 | 0.92 | 0.94 |

Table 8.E.10 Reliability Estimates by Student Group—Grade One

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Student Group** | **N** | **Listening Alpha** | **Speaking Alpha** | **Reading Alpha** | **Writing Alpha** | **Oral Language Composite Alpha** | **Written Language Composite Alpha** | **Overall Score Alpha** |
| Male | 46,388 | 0.74 | 0.85 | 0.90 | 0.88 | 0.86 | 0.92 | 0.94 |
| Female | 42,416 | 0.70 | 0.84 | 0.89 | 0.87 | 0.84 | 0.92 | 0.93 |
| Nonbinary | 13 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| American Indian or Alaska Native | 156 | 0.72 | 0.82 | 0.91 | 0.88 | 0.84 | 0.93 | 0.94 |
| Asian | 11,798 | 0.74 | 0.83 | 0.89 | 0.86 | 0.85 | 0.92 | 0.93 |
| Native Hawaiian or Other Pacific Islander | 219 | 0.69 | 0.82 | 0.91 | 0.89 | 0.83 | 0.93 | 0.94 |
| Filipino | 573 | 0.69 | 0.80 | 0.89 | 0.87 | 0.83 | 0.91 | 0.93 |
| Hispanic or Latino | 69,268 | 0.71 | 0.85 | 0.89 | 0.88 | 0.85 | 0.92 | 0.93 |
| Black or African American | 463 | 0.74 | 0.85 | 0.89 | 0.89 | 0.86 | 0.92 | 0.94 |
| White | 5,007 | 0.76 | 0.87 | 0.90 | 0.89 | 0.88 | 0.93 | 0.94 |
| Two or more races | 1,333 | 0.78 | 0.86 | 0.91 | 0.89 | 0.88 | 0.93 | 0.94 |
| Economically disadvantaged | 78,842 | 0.71 | 0.84 | 0.89 | 0.87 | 0.85 | 0.92 | 0.93 |
| Not economically disadvantaged | 9,975 | 0.76 | 0.87 | 0.89 | 0.89 | 0.88 | 0.92 | 0.94 |
| Reported disabilities | 15,397 | 0.77 | 0.86 | 0.90 | 0.89 | 0.88 | 0.93 | 0.94 |
| No reported disabilities | 73,420 | 0.71 | 0.84 | 0.89 | 0.88 | 0.85 | 0.92 | 0.93 |
| Migrant education | 2,012 | 0.73 | 0.87 | 0.88 | 0.88 | 0.87 | 0.92 | 0.93 |
| Not migrant education | 86,805 | 0.72 | 0.84 | 0.89 | 0.88 | 0.85 | 0.92 | 0.93 |
| Armed forces family member | 835 | 0.66 | 0.81 | 0.90 | 0.87 | 0.81 | 0.92 | 0.92 |
| Not armed forces family member | 87,982 | 0.72 | 0.85 | 0.89 | 0.88 | 0.85 | 0.92 | 0.93 |
| Homeless | 5,008 | 0.75 | 0.89 | 0.89 | 0.89 | 0.88 | 0.92 | 0.94 |
| Not homeless | 83,809 | 0.72 | 0.84 | 0.89 | 0.88 | 0.85 | 0.92 | 0.93 |
| Foster youth | 271 | 0.65 | 0.77 | 0.87 | 0.86 | 0.79 | 0.90 | 0.91 |
| Not foster youth | 88,546 | 0.72 | 0.85 | 0.89 | 0.88 | 0.85 | 0.92 | 0.93 |

Table 8.E.11 Reliability Estimates by Student Group—Grade Two

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Student Group** | **N** | **Listening Alpha** | **Speaking Alpha** | **Reading Alpha** | **Writing Alpha** | **Oral Language Composite Alpha** | **Written Language Composite Alpha** | **Overall Score Alpha** |
| Male | 48,934 | 0.77 | 0.84 | 0.89 | 0.90 | 0.87 | 0.92 | 0.94 |
| Female | 43,402 | 0.72 | 0.83 | 0.89 | 0.89 | 0.86 | 0.92 | 0.93 |
| Nonbinary | 9 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| American Indian or Alaska Native | 143 | 0.74 | 0.85 | 0.89 | 0.92 | 0.87 | 0.93 | 0.94 |
| Asian | 10,869 | 0.78 | 0.85 | 0.88 | 0.88 | 0.88 | 0.91 | 0.94 |
| Native Hawaiian or Other Pacific Islander | 224 | 0.77 | 0.79 | 0.90 | 0.91 | 0.85 | 0.93 | 0.94 |
| Filipino | 628 | 0.67 | 0.81 | 0.86 | 0.86 | 0.83 | 0.89 | 0.91 |
| Hispanic or Latino | 74,067 | 0.74 | 0.83 | 0.89 | 0.89 | 0.86 | 0.92 | 0.93 |
| Black or African American | 423 | 0.74 | 0.80 | 0.88 | 0.88 | 0.85 | 0.91 | 0.93 |
| White | 4,843 | 0.80 | 0.88 | 0.89 | 0.90 | 0.90 | 0.92 | 0.94 |
| Two or more races | 1,148 | 0.80 | 0.85 | 0.89 | 0.91 | 0.89 | 0.92 | 0.94 |
| Economically disadvantaged | 81,475 | 0.74 | 0.83 | 0.89 | 0.89 | 0.86 | 0.92 | 0.93 |
| Not economically disadvantaged | 10,870 | 0.77 | 0.86 | 0.89 | 0.90 | 0.88 | 0.92 | 0.94 |
| Reported disabilities | 13,755 | 0.79 | 0.86 | 0.89 | 0.90 | 0.89 | 0.92 | 0.94 |
| No reported disabilities | 78,590 | 0.74 | 0.83 | 0.89 | 0.89 | 0.86 | 0.92 | 0.93 |
| Migrant education | 2,421 | 0.76 | 0.87 | 0.89 | 0.90 | 0.89 | 0.92 | 0.94 |
| Not migrant education | 89,924 | 0.75 | 0.84 | 0.89 | 0.89 | 0.87 | 0.92 | 0.93 |
| Armed forces family member | 981 | 0.71 | 0.81 | 0.88 | 0.88 | 0.84 | 0.91 | 0.92 |
| Not armed forces family member | 91,364 | 0.75 | 0.84 | 0.89 | 0.89 | 0.87 | 0.92 | 0.93 |
| Homeless | 5,259 | 0.78 | 0.88 | 0.89 | 0.90 | 0.89 | 0.92 | 0.94 |
| Not homeless | 87,086 | 0.75 | 0.83 | 0.89 | 0.89 | 0.86 | 0.92 | 0.93 |
| Foster youth | 254 | 0.72 | 0.78 | 0.90 | 0.90 | 0.83 | 0.92 | 0.92 |
| Not foster youth | 92,091 | 0.75 | 0.84 | 0.89 | 0.89 | 0.87 | 0.92 | 0.93 |

Table 8.E.12 Reliability Estimates by Student Group—Grade Three

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Student Group** | **N** | **Listening Alpha** | **Speaking Alpha** | **Reading Alpha** | **Writing Alpha** | **Oral Language Composite Alpha** | **Written Language Composite Alpha** | **Overall Score Alpha** |
| Male | 51,653 | 0.75 | 0.87 | 0.79 | 0.87 | 0.88 | 0.87 | 0.92 |
| Female | 45,883 | 0.71 | 0.87 | 0.77 | 0.86 | 0.87 | 0.86 | 0.92 |
| Nonbinary | 6 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| American Indian or Alaska Native | 131 | 0.76 | 0.88 | 0.79 | 0.87 | 0.89 | 0.88 | 0.93 |
| Asian | 10,431 | 0.77 | 0.88 | 0.82 | 0.85 | 0.89 | 0.88 | 0.93 |
| Native Hawaiian or Other Pacific Islander | 265 | 0.73 | 0.88 | 0.76 | 0.84 | 0.88 | 0.85 | 0.91 |
| Filipino | 734 | 0.70 | 0.85 | 0.80 | 0.81 | 0.85 | 0.87 | 0.91 |
| Hispanic or Latino | 79,264 | 0.72 | 0.86 | 0.77 | 0.86 | 0.87 | 0.86 | 0.91 |
| Black or African American | 427 | 0.75 | 0.87 | 0.81 | 0.86 | 0.88 | 0.87 | 0.92 |
| White | 5,001 | 0.79 | 0.90 | 0.81 | 0.87 | 0.90 | 0.88 | 0.94 |
| Two or more races | 1,289 | 0.79 | 0.88 | 0.82 | 0.88 | 0.89 | 0.88 | 0.93 |
| Economically disadvantaged | 84,799 | 0.73 | 0.86 | 0.78 | 0.86 | 0.87 | 0.87 | 0.92 |
| Not economically disadvantaged | 12,743 | 0.74 | 0.88 | 0.70 | 0.87 | 0.88 | 0.83 | 0.91 |
| Reported disabilities | 14,134 | 0.79 | 0.88 | 0.82 | 0.87 | 0.89 | 0.88 | 0.93 |
| No reported disabilities | 83,408 | 0.72 | 0.87 | 0.77 | 0.86 | 0.87 | 0.86 | 0.91 |
| Migrant education | 2,639 | 0.75 | 0.88 | 0.75 | 0.88 | 0.88 | 0.86 | 0.92 |
| Not migrant education | 94,903 | 0.73 | 0.87 | 0.78 | 0.86 | 0.87 | 0.87 | 0.92 |
| Armed forces family member | 1,047 | 0.72 | 0.85 | 0.78 | 0.85 | 0.86 | 0.87 | 0.91 |
| Not armed forces family member | 96,495 | 0.74 | 0.87 | 0.78 | 0.86 | 0.87 | 0.87 | 0.92 |
| Homeless | 6,159 | 0.78 | 0.89 | 0.74 | 0.88 | 0.89 | 0.86 | 0.93 |
| Not homeless | 91,383 | 0.73 | 0.87 | 0.78 | 0.86 | 0.87 | 0.87 | 0.92 |
| Foster youth | 251 | 0.74 | 0.86 | 0.74 | 0.86 | 0.86 | 0.85 | 0.91 |
| Not foster youth | 97,291 | 0.74 | 0.87 | 0.78 | 0.86 | 0.87 | 0.87 | 0.92 |

Table 8.E.13 Reliability Estimates by Student Group—Grade Four

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Student Group** | **N** | **Listening Alpha** | **Speaking Alpha** | **Reading Alpha** | **Writing Alpha** | **Oral Language Composite Alpha** | **Written Language Composite Alpha** | **Overall Score Alpha** |
| Male | 49,765 | 0.77 | 0.87 | 0.83 | 0.87 | 0.88 | 0.89 | 0.93 |
| Female | 44,152 | 0.73 | 0.87 | 0.81 | 0.85 | 0.87 | 0.88 | 0.92 |
| Nonbinary | 5 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| American Indian or Alaska Native | 141 | 0.76 | 0.87 | 0.83 | 0.85 | 0.88 | 0.89 | 0.92 |
| Asian | 9,529 | 0.79 | 0.89 | 0.84 | 0.85 | 0.90 | 0.89 | 0.94 |
| Native Hawaiian or Other Pacific Islander | 258 | 0.77 | 0.86 | 0.82 | 0.84 | 0.87 | 0.88 | 0.92 |
| Filipino | 803 | 0.69 | 0.83 | 0.80 | 0.77 | 0.84 | 0.85 | 0.90 |
| Hispanic or Latino | 77,145 | 0.74 | 0.86 | 0.82 | 0.86 | 0.87 | 0.88 | 0.92 |
| Black or African American | 419 | 0.77 | 0.87 | 0.84 | 0.87 | 0.88 | 0.89 | 0.93 |
| White | 4,520 | 0.81 | 0.90 | 0.84 | 0.88 | 0.91 | 0.90 | 0.94 |
| Two or more races | 1,107 | 0.82 | 0.89 | 0.85 | 0.88 | 0.91 | 0.90 | 0.94 |
| Economically disadvantaged | 80,130 | 0.75 | 0.86 | 0.82 | 0.85 | 0.87 | 0.88 | 0.92 |
| Not economically disadvantaged | 13,792 | 0.74 | 0.87 | 0.78 | 0.87 | 0.87 | 0.86 | 0.91 |
| Reported disabilities | 12,765 | 0.82 | 0.89 | 0.84 | 0.87 | 0.91 | 0.90 | 0.94 |
| No reported disabilities | 81,157 | 0.74 | 0.86 | 0.82 | 0.86 | 0.87 | 0.88 | 0.92 |
| Migrant education | 2,395 | 0.78 | 0.88 | 0.81 | 0.88 | 0.89 | 0.89 | 0.93 |
| Not migrant education | 91,527 | 0.75 | 0.87 | 0.82 | 0.86 | 0.88 | 0.89 | 0.92 |
| Armed forces family member | 1,023 | 0.70 | 0.83 | 0.82 | 0.82 | 0.84 | 0.88 | 0.90 |
| Not armed forces family member | 92,899 | 0.75 | 0.87 | 0.82 | 0.86 | 0.88 | 0.89 | 0.93 |
| Homeless | 6,135 | 0.81 | 0.89 | 0.82 | 0.89 | 0.91 | 0.89 | 0.94 |
| Not homeless | 87,787 | 0.75 | 0.86 | 0.82 | 0.86 | 0.87 | 0.88 | 0.92 |
| Foster youth | 254 | 0.71 | 0.87 | 0.84 | 0.89 | 0.86 | 0.90 | 0.93 |
| Not foster youth | 93,668 | 0.75 | 0.87 | 0.82 | 0.86 | 0.88 | 0.89 | 0.92 |

Table 8.E.14 Reliability Estimates by Student Group—Grade Five

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Student Group** | **N** | **Listening Alpha** | **Speaking Alpha** | **Reading Alpha** | **Writing Alpha** | **Oral Language Composite Alpha** | **Written Language Composite Alpha** | **Overall Score Alpha** |
| Male | 46,874 | 0.78 | 0.87 | 0.85 | 0.86 | 0.89 | 0.90 | 0.93 |
| Female | 42,206 | 0.75 | 0.87 | 0.83 | 0.84 | 0.88 | 0.88 | 0.93 |
| Nonbinary | 10 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| American Indian or Alaska Native | 120 | 0.76 | 0.84 | 0.84 | 0.90 | 0.88 | 0.90 | 0.93 |
| Asian | 7,947 | 0.81 | 0.89 | 0.86 | 0.86 | 0.91 | 0.90 | 0.94 |
| Native Hawaiian or Other Pacific Islander | 271 | 0.80 | 0.88 | 0.83 | 0.87 | 0.89 | 0.89 | 0.93 |
| Filipino | 772 | 0.69 | 0.85 | 0.81 | 0.76 | 0.85 | 0.86 | 0.91 |
| Hispanic or Latino | 74,462 | 0.76 | 0.86 | 0.83 | 0.85 | 0.88 | 0.89 | 0.92 |
| Black or African American | 401 | 0.79 | 0.90 | 0.87 | 0.87 | 0.90 | 0.91 | 0.94 |
| White | 4,077 | 0.81 | 0.91 | 0.86 | 0.88 | 0.92 | 0.91 | 0.95 |
| Two or more races | 1,040 | 0.83 | 0.90 | 0.86 | 0.86 | 0.92 | 0.90 | 0.95 |
| Economically disadvantaged | 74,881 | 0.77 | 0.87 | 0.83 | 0.84 | 0.88 | 0.89 | 0.93 |
| Not economically disadvantaged | 14,209 | 0.74 | 0.85 | 0.81 | 0.85 | 0.86 | 0.88 | 0.91 |
| Reported disabilities | 11,500 | 0.82 | 0.90 | 0.85 | 0.88 | 0.91 | 0.90 | 0.94 |
| No reported disabilities | 77,590 | 0.76 | 0.86 | 0.84 | 0.85 | 0.88 | 0.89 | 0.93 |
| Migrant education | 2,446 | 0.81 | 0.89 | 0.84 | 0.88 | 0.90 | 0.90 | 0.94 |
| Not migrant education | 86,644 | 0.77 | 0.87 | 0.84 | 0.85 | 0.88 | 0.89 | 0.93 |
| Armed forces family member | 1,054 | 0.68 | 0.83 | 0.83 | 0.81 | 0.83 | 0.88 | 0.90 |
| Not armed forces family member | 88,036 | 0.77 | 0.87 | 0.84 | 0.85 | 0.88 | 0.89 | 0.93 |
| Homeless | 5,914 | 0.83 | 0.90 | 0.85 | 0.89 | 0.91 | 0.90 | 0.95 |
| Not homeless | 83,176 | 0.76 | 0.87 | 0.84 | 0.85 | 0.88 | 0.89 | 0.93 |
| Foster youth | 270 | 0.77 | 0.87 | 0.84 | 0.89 | 0.87 | 0.90 | 0.92 |
| Not foster youth | 88,820 | 0.77 | 0.87 | 0.84 | 0.85 | 0.88 | 0.89 | 0.93 |

Table 8.E.15 Reliability Estimates by Student Group—Grade Six

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Student Group** | **N** | **Listening Alpha** | **Speaking Alpha** | **Reading Alpha** | **Writing Alpha** | **Oral Language Composite Alpha** | **Written Language Composite Alpha** | **Overall Score Alpha** |
| Male | 40,295 | 0.78 | 0.87 | 0.80 | 0.85 | 0.89 | 0.87 | 0.93 |
| Female | 35,332 | 0.76 | 0.87 | 0.79 | 0.83 | 0.88 | 0.86 | 0.92 |
| Nonbinary | 15 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| American Indian or Alaska Native | 103 | 0.78 | 0.87 | 0.77 | 0.86 | 0.89 | 0.85 | 0.92 |
| Asian | 6,133 | 0.81 | 0.89 | 0.82 | 0.86 | 0.91 | 0.89 | 0.94 |
| Native Hawaiian or Other Pacific Islander | 236 | 0.71 | 0.85 | 0.76 | 0.84 | 0.87 | 0.85 | 0.91 |
| Filipino | 654 | 0.67 | 0.82 | 0.77 | 0.75 | 0.84 | 0.84 | 0.90 |
| Hispanic or Latino | 63,930 | 0.76 | 0.86 | 0.80 | 0.84 | 0.88 | 0.87 | 0.92 |
| Black or African American | 334 | 0.80 | 0.88 | 0.82 | 0.85 | 0.89 | 0.88 | 0.93 |
| White | 3,422 | 0.80 | 0.91 | 0.82 | 0.89 | 0.91 | 0.89 | 0.94 |
| Two or more races | 830 | 0.81 | 0.89 | 0.81 | 0.88 | 0.91 | 0.88 | 0.94 |
| Economically disadvantaged | 62,096 | 0.77 | 0.87 | 0.80 | 0.84 | 0.89 | 0.87 | 0.93 |
| Not economically disadvantaged | 13,546 | 0.73 | 0.84 | 0.74 | 0.84 | 0.85 | 0.84 | 0.90 |
| Reported disabilities | 9,904 | 0.81 | 0.90 | 0.82 | 0.87 | 0.91 | 0.89 | 0.94 |
| No reported disabilities | 65,738 | 0.76 | 0.86 | 0.80 | 0.84 | 0.88 | 0.87 | 0.92 |
| Migrant education | 2,049 | 0.79 | 0.90 | 0.80 | 0.87 | 0.90 | 0.88 | 0.94 |
| Not migrant education | 73,593 | 0.77 | 0.87 | 0.80 | 0.85 | 0.88 | 0.87 | 0.92 |
| Armed forces family member | 720 | 0.72 | 0.83 | 0.79 | 0.80 | 0.84 | 0.85 | 0.90 |
| Not armed forces family member | 74,922 | 0.77 | 0.87 | 0.80 | 0.85 | 0.88 | 0.87 | 0.92 |
| Homeless | 4,872 | 0.80 | 0.90 | 0.81 | 0.88 | 0.91 | 0.88 | 0.94 |
| Not homeless | 70,770 | 0.76 | 0.87 | 0.80 | 0.84 | 0.88 | 0.87 | 0.92 |
| Foster youth | 239 | 0.80 | 0.86 | 0.82 | 0.87 | 0.88 | 0.88 | 0.93 |
| Not foster youth | 75,403 | 0.77 | 0.87 | 0.80 | 0.85 | 0.88 | 0.87 | 0.92 |

Table 8.E.16 Reliability Estimates by Student Group—Grade Seven

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Student Group** | **N** | **Listening Alpha** | **Speaking Alpha** | **Reading Alpha** | **Writing Alpha** | **Oral Language Composite Alpha** | **Written Language Composite Alpha** | **Overall Score Alpha** |
| Male | 35,331 | 0.81 | 0.88 | 0.83 | 0.86 | 0.90 | 0.89 | 0.93 |
| Female | 30,608 | 0.79 | 0.88 | 0.82 | 0.84 | 0.89 | 0.88 | 0.93 |
| Nonbinary | 6 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| American Indian or Alaska Native | 93 | 0.79 | 0.92 | 0.83 | 0.86 | 0.91 | 0.89 | 0.94 |
| Asian | 5,365 | 0.82 | 0.90 | 0.84 | 0.86 | 0.91 | 0.90 | 0.94 |
| Native Hawaiian or Other Pacific Islander | 214 | 0.77 | 0.85 | 0.82 | 0.84 | 0.87 | 0.88 | 0.92 |
| Filipino | 640 | 0.69 | 0.80 | 0.80 | 0.71 | 0.83 | 0.84 | 0.89 |
| Hispanic or Latino | 55,495 | 0.79 | 0.88 | 0.83 | 0.85 | 0.89 | 0.88 | 0.93 |
| Black or African American | 314 | 0.83 | 0.92 | 0.84 | 0.86 | 0.91 | 0.89 | 0.94 |
| White | 3,167 | 0.82 | 0.91 | 0.84 | 0.88 | 0.91 | 0.90 | 0.95 |
| Two or more races | 657 | 0.83 | 0.89 | 0.86 | 0.88 | 0.91 | 0.90 | 0.95 |
| Economically disadvantaged | 53,554 | 0.80 | 0.89 | 0.83 | 0.85 | 0.90 | 0.88 | 0.94 |
| Not economically disadvantaged | 12,391 | 0.75 | 0.83 | 0.78 | 0.82 | 0.85 | 0.85 | 0.90 |
| Reported disabilities | 8,703 | 0.84 | 0.91 | 0.85 | 0.88 | 0.92 | 0.90 | 0.95 |
| No reported disabilities | 57,242 | 0.79 | 0.88 | 0.83 | 0.84 | 0.89 | 0.88 | 0.93 |
| Migrant education | 1,723 | 0.83 | 0.91 | 0.84 | 0.89 | 0.92 | 0.90 | 0.95 |
| Not migrant education | 64,222 | 0.80 | 0.88 | 0.83 | 0.85 | 0.89 | 0.88 | 0.93 |
| Armed forces family member | 607 | 0.79 | 0.85 | 0.84 | 0.82 | 0.87 | 0.88 | 0.92 |
| Not armed forces family member | 65,338 | 0.80 | 0.88 | 0.83 | 0.85 | 0.90 | 0.88 | 0.93 |
| Homeless | 4,151 | 0.84 | 0.92 | 0.84 | 0.89 | 0.92 | 0.90 | 0.95 |
| Not homeless | 61,794 | 0.79 | 0.88 | 0.83 | 0.85 | 0.89 | 0.88 | 0.93 |
| Foster youth | 198 | 0.80 | 0.87 | 0.81 | 0.85 | 0.89 | 0.88 | 0.93 |
| Not foster youth | 65,747 | 0.80 | 0.88 | 0.83 | 0.85 | 0.90 | 0.88 | 0.93 |

Table 8.E.17 Reliability Estimates by Student Group—Grade Eight

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Student Group** | **N** | **Listening Alpha** | **Speaking Alpha** | **Reading Alpha** | **Writing Alpha** | **Oral Language Composite Alpha** | **Written Language Composite Alpha** | **Overall Score Alpha** |
| Male | 32,862 | 0.82 | 0.89 | 0.85 | 0.86 | 0.91 | 0.90 | 0.94 |
| Female | 27,304 | 0.81 | 0.89 | 0.84 | 0.84 | 0.90 | 0.89 | 0.94 |
| Nonbinary | 12 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| American Indian or Alaska Native | 94 | 0.79 | 0.86 | 0.84 | 0.86 | 0.88 | 0.89 | 0.92 |
| Asian | 4,544 | 0.84 | 0.90 | 0.85 | 0.85 | 0.92 | 0.90 | 0.95 |
| Native Hawaiian or Other Pacific Islander | 199 | 0.75 | 0.84 | 0.81 | 0.84 | 0.87 | 0.87 | 0.92 |
| Filipino | 612 | 0.70 | 0.82 | 0.80 | 0.73 | 0.84 | 0.85 | 0.89 |
| Hispanic or Latino | 51,192 | 0.82 | 0.89 | 0.85 | 0.85 | 0.90 | 0.89 | 0.94 |
| Black or African American | 252 | 0.82 | 0.89 | 0.86 | 0.84 | 0.91 | 0.90 | 0.94 |
| White | 2,738 | 0.83 | 0.91 | 0.86 | 0.88 | 0.92 | 0.90 | 0.95 |
| Two or more races | 547 | 0.84 | 0.91 | 0.85 | 0.89 | 0.92 | 0.90 | 0.95 |
| Economically disadvantaged | 48,569 | 0.83 | 0.90 | 0.85 | 0.86 | 0.91 | 0.89 | 0.94 |
| Not economically disadvantaged | 11,609 | 0.77 | 0.83 | 0.81 | 0.82 | 0.85 | 0.87 | 0.91 |
| Reported disabilities | 7,907 | 0.85 | 0.91 | 0.86 | 0.89 | 0.92 | 0.91 | 0.95 |
| No reported disabilities | 52,271 | 0.81 | 0.89 | 0.84 | 0.84 | 0.90 | 0.89 | 0.94 |
| Migrant education | 1,613 | 0.84 | 0.92 | 0.86 | 0.89 | 0.93 | 0.91 | 0.95 |
| Not migrant education | 58,565 | 0.82 | 0.89 | 0.85 | 0.85 | 0.90 | 0.89 | 0.94 |
| Armed forces family member | 769 | 0.78 | 0.87 | 0.84 | 0.82 | 0.88 | 0.88 | 0.92 |
| Not armed forces family member | 59,409 | 0.82 | 0.89 | 0.85 | 0.85 | 0.91 | 0.89 | 0.94 |
| Homeless | 3,972 | 0.85 | 0.92 | 0.86 | 0.89 | 0.93 | 0.91 | 0.95 |
| Not homeless | 56,206 | 0.81 | 0.89 | 0.84 | 0.85 | 0.90 | 0.89 | 0.94 |
| Foster youth | 205 | 0.82 | 0.87 | 0.85 | 0.87 | 0.90 | 0.90 | 0.94 |
| Not foster youth | 59,973 | 0.82 | 0.89 | 0.85 | 0.85 | 0.91 | 0.89 | 0.94 |

Table 8.E.18 Reliability Estimates by Student Group—Grade Nine

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Student Group** | **N** | **Listening Alpha** | **Speaking Alpha** | **Reading Alpha** | **Writing Alpha** | **Oral Language Composite Alpha** | **Written Language Composite Alpha** | **Overall Score Alpha** |
| Male | 33,488 | 0.80 | 0.90 | 0.82 | 0.87 | 0.91 | 0.88 | 0.94 |
| Female | 26,275 | 0.79 | 0.90 | 0.80 | 0.86 | 0.91 | 0.87 | 0.94 |
| Nonbinary | 27 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| American Indian or Alaska Native | 83 | 0.79 | 0.88 | 0.80 | 0.87 | 0.88 | 0.87 | 0.93 |
| Asian | 4,400 | 0.79 | 0.90 | 0.82 | 0.84 | 0.90 | 0.88 | 0.94 |
| Native Hawaiian or Other Pacific Islander | 209 | 0.76 | 0.88 | 0.80 | 0.80 | 0.88 | 0.85 | 0.92 |
| Filipino | 647 | 0.70 | 0.83 | 0.76 | 0.77 | 0.83 | 0.84 | 0.90 |
| Hispanic or Latino | 50,809 | 0.80 | 0.90 | 0.81 | 0.86 | 0.91 | 0.88 | 0.94 |
| Black or African American | 285 | 0.81 | 0.91 | 0.83 | 0.85 | 0.91 | 0.89 | 0.94 |
| White | 2,732 | 0.79 | 0.91 | 0.82 | 0.86 | 0.91 | 0.88 | 0.94 |
| Two or more races | 625 | 0.82 | 0.93 | 0.83 | 0.90 | 0.93 | 0.90 | 0.95 |
| Economically disadvantaged | 48,579 | 0.81 | 0.91 | 0.81 | 0.87 | 0.91 | 0.88 | 0.94 |
| Not economically disadvantaged | 11,211 | 0.75 | 0.81 | 0.77 | 0.80 | 0.83 | 0.84 | 0.89 |
| Reported disabilities | 9,052 | 0.83 | 0.93 | 0.83 | 0.90 | 0.93 | 0.90 | 0.95 |
| No reported disabilities | 50,738 | 0.79 | 0.90 | 0.80 | 0.85 | 0.90 | 0.87 | 0.93 |
| Migrant education | 1,328 | 0.82 | 0.92 | 0.83 | 0.88 | 0.92 | 0.89 | 0.95 |
| Not migrant education | 58,462 | 0.80 | 0.90 | 0.81 | 0.86 | 0.91 | 0.88 | 0.94 |
| Armed forces family member | 569 | 0.76 | 0.86 | 0.81 | 0.78 | 0.86 | 0.86 | 0.91 |
| Not armed forces family member | 59,221 | 0.80 | 0.90 | 0.81 | 0.86 | 0.91 | 0.88 | 0.94 |
| Homeless | 3,754 | 0.83 | 0.93 | 0.81 | 0.89 | 0.93 | 0.89 | 0.95 |
| Not homeless | 56,036 | 0.79 | 0.90 | 0.81 | 0.86 | 0.90 | 0.88 | 0.94 |
| Foster youth | 239 | 0.82 | 0.91 | 0.83 | 0.86 | 0.91 | 0.88 | 0.94 |
| Not foster youth | 59,551 | 0.80 | 0.90 | 0.81 | 0.86 | 0.91 | 0.88 | 0.94 |

Table 8.E.19 Reliability Estimates by Student Group—Grade Ten

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Student Group** | **N** | **Listening Alpha** | **Speaking Alpha** | **Reading Alpha** | **Writing Alpha** | **Oral Language Composite Alpha** | **Written Language Composite Alpha** | **Overall Score Alpha** |
| Male | 32,197 | 0.82 | 0.91 | 0.84 | 0.85 | 0.91 | 0.89 | 0.94 |
| Female | 24,777 | 0.80 | 0.91 | 0.81 | 0.85 | 0.91 | 0.88 | 0.94 |
| Nonbinary | 19 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| American Indian or Alaska Native | 93 | 0.81 | 0.90 | 0.80 | 0.87 | 0.91 | 0.88 | 0.94 |
| Asian | 4,299 | 0.80 | 0.90 | 0.83 | 0.83 | 0.91 | 0.88 | 0.94 |
| Native Hawaiian or Other Pacific Islander | 179 | 0.70 | 0.87 | 0.77 | 0.75 | 0.86 | 0.84 | 0.91 |
| Filipino | 653 | 0.72 | 0.84 | 0.79 | 0.71 | 0.85 | 0.84 | 0.90 |
| Hispanic or Latino | 48,414 | 0.81 | 0.91 | 0.82 | 0.86 | 0.91 | 0.88 | 0.94 |
| Black or African American | 283 | 0.83 | 0.91 | 0.85 | 0.85 | 0.92 | 0.90 | 0.94 |
| White | 2,567 | 0.81 | 0.92 | 0.84 | 0.86 | 0.91 | 0.89 | 0.94 |
| Two or more races | 505 | 0.82 | 0.91 | 0.83 | 0.86 | 0.91 | 0.89 | 0.94 |
| Economically disadvantaged | 46,377 | 0.82 | 0.92 | 0.83 | 0.86 | 0.92 | 0.89 | 0.95 |
| Not economically disadvantaged | 10,616 | 0.75 | 0.81 | 0.79 | 0.80 | 0.83 | 0.85 | 0.89 |
| Reported disabilities | 8,322 | 0.82 | 0.92 | 0.84 | 0.87 | 0.92 | 0.90 | 0.95 |
| No reported disabilities | 48,671 | 0.81 | 0.91 | 0.82 | 0.85 | 0.91 | 0.88 | 0.94 |
| Migrant education | 1,416 | 0.83 | 0.93 | 0.83 | 0.87 | 0.93 | 0.89 | 0.95 |
| Not migrant education | 55,577 | 0.81 | 0.91 | 0.83 | 0.85 | 0.91 | 0.88 | 0.94 |
| Armed forces family member | 787 | 0.76 | 0.88 | 0.81 | 0.78 | 0.87 | 0.86 | 0.91 |
| Not armed forces family member | 56,206 | 0.81 | 0.91 | 0.83 | 0.85 | 0.91 | 0.88 | 0.94 |
| Homeless | 3,520 | 0.84 | 0.93 | 0.83 | 0.88 | 0.93 | 0.89 | 0.95 |
| Not homeless | 53,473 | 0.81 | 0.90 | 0.83 | 0.85 | 0.91 | 0.88 | 0.94 |
| Foster youth | 246 | 0.78 | 0.89 | 0.80 | 0.87 | 0.90 | 0.88 | 0.93 |
| Not foster youth | 56,747 | 0.81 | 0.91 | 0.83 | 0.85 | 0.91 | 0.88 | 0.94 |

Table 8.E.20 Reliability Estimates by Student Group—Grade Eleven

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Student Group** | **N** | **Listening Alpha** | **Speaking Alpha** | **Reading Alpha** | **Writing Alpha** | **Oral Language Composite Alpha** | **Written Language Composite Alpha** | **Overall Score Alpha** |
| Male | 27,716 | 0.81 | 0.90 | 0.81 | 0.87 | 0.90 | 0.88 | 0.94 |
| Female | 21,496 | 0.80 | 0.90 | 0.79 | 0.86 | 0.90 | 0.87 | 0.93 |
| Nonbinary | 29 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| American Indian or Alaska Native | 67 | 0.78 | 0.93 | 0.82 | 0.81 | 0.92 | 0.86 | 0.94 |
| Asian | 3,890 | 0.83 | 0.89 | 0.82 | 0.85 | 0.91 | 0.88 | 0.94 |
| Native Hawaiian or Other Pacific Islander | 171 | 0.75 | 0.85 | 0.76 | 0.81 | 0.87 | 0.83 | 0.91 |
| Filipino | 673 | 0.70 | 0.81 | 0.75 | 0.68 | 0.82 | 0.81 | 0.88 |
| Hispanic or Latino | 41,652 | 0.80 | 0.90 | 0.79 | 0.87 | 0.90 | 0.87 | 0.94 |
| Black or African American | 238 | 0.78 | 0.88 | 0.84 | 0.83 | 0.89 | 0.89 | 0.93 |
| White | 2,110 | 0.83 | 0.90 | 0.82 | 0.87 | 0.91 | 0.89 | 0.94 |
| Two or more races | 440 | 0.85 | 0.91 | 0.83 | 0.90 | 0.92 | 0.90 | 0.95 |
| Economically disadvantaged | 39,775 | 0.82 | 0.91 | 0.80 | 0.87 | 0.91 | 0.88 | 0.94 |
| Not economically disadvantaged | 9,466 | 0.74 | 0.81 | 0.76 | 0.80 | 0.83 | 0.83 | 0.89 |
| Reported disabilities | 7,290 | 0.83 | 0.91 | 0.82 | 0.89 | 0.92 | 0.89 | 0.95 |
| No reported disabilities | 41,951 | 0.80 | 0.89 | 0.80 | 0.86 | 0.90 | 0.87 | 0.93 |
| Migrant education | 1,328 | 0.83 | 0.92 | 0.80 | 0.89 | 0.92 | 0.88 | 0.95 |
| Not migrant education | 47,913 | 0.81 | 0.90 | 0.80 | 0.86 | 0.90 | 0.87 | 0.94 |
| Armed forces family member | 726 | 0.78 | 0.86 | 0.78 | 0.80 | 0.87 | 0.84 | 0.92 |
| Not armed forces family member | 48,515 | 0.81 | 0.90 | 0.80 | 0.87 | 0.90 | 0.87 | 0.94 |
| Homeless | 3,215 | 0.83 | 0.92 | 0.80 | 0.89 | 0.92 | 0.88 | 0.95 |
| Not homeless | 46,026 | 0.80 | 0.89 | 0.80 | 0.86 | 0.90 | 0.87 | 0.93 |
| Foster youth | 222 | 0.80 | 0.88 | 0.80 | 0.88 | 0.90 | 0.87 | 0.93 |
| Not foster youth | 49,019 | 0.81 | 0.90 | 0.80 | 0.86 | 0.90 | 0.87 | 0.94 |

Table 8.E.21 Reliability Estimates by Student Group—Grade Twelve

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Student Group** | **N** | **Listening Alpha** | **Speaking Alpha** | **Reading Alpha** | **Writing Alpha** | **Oral Language Composite Alpha** | **Written Language Composite Alpha** | **Overall Score Alpha** |
| Male | 22,556 | 0.82 | 0.90 | 0.82 | 0.87 | 0.90 | 0.88 | 0.94 |
| Female | 16,904 | 0.81 | 0.90 | 0.80 | 0.85 | 0.91 | 0.87 | 0.94 |
| Nonbinary | 14 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| American Indian or Alaska Native | 45 | 0.84 | 0.90 | 0.84 | 0.82 | 0.92 | 0.88 | 0.94 |
| Asian | 3,413 | 0.83 | 0.90 | 0.82 | 0.85 | 0.91 | 0.88 | 0.94 |
| Native Hawaiian or Other Pacific Islander | 140 | 0.77 | 0.87 | 0.79 | 0.82 | 0.87 | 0.85 | 0.91 |
| Filipino | 612 | 0.73 | 0.80 | 0.77 | 0.74 | 0.81 | 0.83 | 0.89 |
| Hispanic or Latino | 33,136 | 0.82 | 0.90 | 0.80 | 0.87 | 0.90 | 0.87 | 0.94 |
| Black or African American | 226 | 0.80 | 0.88 | 0.84 | 0.80 | 0.89 | 0.88 | 0.93 |
| White | 1,597 | 0.84 | 0.90 | 0.84 | 0.88 | 0.91 | 0.90 | 0.95 |
| Two or more races | 305 | 0.82 | 0.90 | 0.83 | 0.89 | 0.91 | 0.89 | 0.94 |
| Economically disadvantaged | 31,762 | 0.83 | 0.91 | 0.81 | 0.87 | 0.91 | 0.88 | 0.94 |
| Not economically disadvantaged | 7,712 | 0.77 | 0.83 | 0.77 | 0.82 | 0.84 | 0.84 | 0.90 |
| Reported disabilities | 5,695 | 0.83 | 0.91 | 0.83 | 0.87 | 0.91 | 0.89 | 0.94 |
| No reported disabilities | 33,779 | 0.82 | 0.90 | 0.80 | 0.86 | 0.90 | 0.87 | 0.94 |
| Migrant education | 1,038 | 0.84 | 0.92 | 0.82 | 0.89 | 0.92 | 0.89 | 0.95 |
| Not migrant education | 38,436 | 0.82 | 0.90 | 0.81 | 0.86 | 0.90 | 0.87 | 0.94 |
| Armed forces family member | 527 | 0.79 | 0.86 | 0.80 | 0.83 | 0.88 | 0.86 | 0.92 |
| Not armed forces family member | 38,947 | 0.82 | 0.90 | 0.81 | 0.86 | 0.90 | 0.87 | 0.94 |
| Homeless | 2,958 | 0.83 | 0.92 | 0.81 | 0.89 | 0.92 | 0.88 | 0.95 |
| Not homeless | 36,516 | 0.82 | 0.90 | 0.81 | 0.86 | 0.90 | 0.87 | 0.93 |
| Foster youth | 193 | 0.82 | 0.91 | 0.75 | 0.89 | 0.91 | 0.86 | 0.93 |
| Not foster youth | 39,281 | 0.82 | 0.90 | 0.81 | 0.86 | 0.90 | 0.87 | 0.94 |

### Appendix 8.F: Classification Analyses

Table 8.F.1 Classification Accuracy at Each Proficiency Threshold Score—Oral Language Composite

|  |  |  |  |
| --- | --- | --- | --- |
| **Grade Level** | **Cut Between Level 1 and Level 2** | **Cut Between Level 2 and Level 3** | **Cut Between Level 3 and Level 4** |
| Kindergarten | 0.93 | 0.88 | 0.92 |
| 1 | 0.93 | 0.84 | 0.90 |
| 2 | 0.95 | 0.86 | 0.89 |
| 3 | 0.94 | 0.87 | 0.88 |
| 4 | 0.95 | 0.89 | 0.87 |
| 5 | 0.96 | 0.89 | 0.88 |
| 6 | 0.95 | 0.90 | 0.88 |
| 7 | 0.95 | 0.90 | 0.89 |
| 8 | 0.95 | 0.90 | 0.89 |
| 9 | 0.92 | 0.85 | 0.91 |
| 10 | 0.94 | 0.87 | 0.90 |
| 11 | 0.94 | 0.87 | 0.90 |
| 12 | 0.94 | 0.87 | 0.90 |

Table 8.F.2 Classification Accuracy at Each Proficiency Threshold Score—Written Language Composite

|  |  |  |  |
| --- | --- | --- | --- |
| **Grade Level** | **Cut Between Level 1 and Level 2** | **Cut Between Level 2 and Level 3** | **Cut Between Level 3 and Level 4** |
| Kindergarten | 0.94 | 0.91 | 0.92 |
| 1 | 0.93 | 0.91 | 0.96 |
| 2 | 0.93 | 0.89 | 0.95 |
| 3 | 0.90 | 0.91 | 0.96 |
| 4 | 0.92 | 0.90 | 0.94 |
| 5 | 0.93 | 0.89 | 0.92 |
| 6 | 0.91 | 0.89 | 0.94 |
| 7 | 0.92 | 0.89 | 0.92 |
| 8 | 0.92 | 0.89 | 0.92 |
| 9 | 0.90 | 0.90 | 0.96 |
| 10 | 0.91 | 0.89 | 0.94 |
| 11 | 0.91 | 0.88 | 0.95 |
| 12 | 0.90 | 0.89 | 0.96 |

Table 8.F.3 Classification Accuracy at Each Proficiency Threshold Score—Overall Score

|  |  |  |  |
| --- | --- | --- | --- |
| **Grade Level** | **Cut Between Level 1 and Level 2** | **Cut Between Level 2 and Level 3** | **Cut Between Level 3 and Level 4** |
| Kindergarten | 0.94 | 0.89 | 0.95 |
| 1 | 0.94 | 0.89 | 0.97 |
| 2 | 0.96 | 0.90 | 0.94 |
| 3 | 0.94 | 0.89 | 0.95 |
| 4 | 0.95 | 0.90 | 0.94 |
| 5 | 0.96 | 0.90 | 0.93 |
| 6 | 0.95 | 0.90 | 0.93 |
| 7 | 0.95 | 0.91 | 0.93 |
| 8 | 0.96 | 0.91 | 0.93 |
| 9 | 0.95 | 0.90 | 0.93 |
| 10 | 0.95 | 0.91 | 0.93 |
| 11 | 0.95 | 0.91 | 0.94 |
| 12 | 0.94 | 0.91 | 0.95 |

Table 8.F.4 Classification Consistency at Each Proficiency Threshold Score—Oral Language Composite

|  |  |  |  |
| --- | --- | --- | --- |
| **Grade Level** | **Cut Between Level 1 and Level 2** | **Cut Between Level 2 and Level 3** | **Cut Between Level 3 and Level 4** |
| Kindergarten | 0.90 | 0.85 | 0.90 |
| 1 | 0.90 | 0.81 | 0.87 |
| 2 | 0.93 | 0.82 | 0.85 |
| 3 | 0.91 | 0.84 | 0.85 |
| 4 | 0.93 | 0.86 | 0.83 |
| 5 | 0.94 | 0.87 | 0.84 |
| 6 | 0.93 | 0.87 | 0.84 |
| 7 | 0.93 | 0.87 | 0.85 |
| 8 | 0.93 | 0.87 | 0.86 |
| 9 | 0.90 | 0.83 | 0.88 |
| 10 | 0.92 | 0.85 | 0.87 |
| 11 | 0.91 | 0.84 | 0.87 |
| 12 | 0.91 | 0.85 | 0.87 |

Table 8.F.5 Classification Consistency at Each Proficiency Threshold Score—Written Language Composite

|  |  |  |  |
| --- | --- | --- | --- |
| **Grade Level** | **Cut Between Level 1 and Level 2** | **Cut Between Level 2 and Level 3** | **Cut Between Level 3 and Level 4** |
| Kindergarten | 0.92 | 0.88 | 0.90 |
| 1 | 0.90 | 0.88 | 0.94 |
| 2 | 0.90 | 0.86 | 0.92 |
| 3 | 0.85 | 0.88 | 0.95 |
| 4 | 0.88 | 0.86 | 0.92 |
| 5 | 0.90 | 0.85 | 0.88 |
| 6 | 0.87 | 0.85 | 0.91 |
| 7 | 0.89 | 0.85 | 0.89 |
| 8 | 0.89 | 0.85 | 0.89 |
| 9 | 0.87 | 0.86 | 0.94 |
| 10 | 0.88 | 0.85 | 0.91 |
| 11 | 0.87 | 0.84 | 0.93 |
| 12 | 0.86 | 0.85 | 0.94 |

Table 8.F.6 Classification Consistency at Each Proficiency Threshold Score—Overall Score

|  |  |  |  |
| --- | --- | --- | --- |
| **Grade Level** | **Cut Between Level 1 and Level 2** | **Cut Between Level 2 and Level 3** | **Cut Between Level 3 and Level 4** |
| Kindergarten | 0.93 | 0.86 | 0.92 |
| 1 | 0.91 | 0.86 | 0.95 |
| 2 | 0.94 | 0.87 | 0.92 |
| 3 | 0.91 | 0.86 | 0.93 |
| 4 | 0.93 | 0.87 | 0.91 |
| 5 | 0.94 | 0.87 | 0.90 |
| 6 | 0.93 | 0.87 | 0.90 |
| 7 | 0.93 | 0.88 | 0.90 |
| 8 | 0.94 | 0.89 | 0.90 |
| 9 | 0.93 | 0.87 | 0.90 |
| 10 | 0.93 | 0.88 | 0.90 |
| 11 | 0.92 | 0.87 | 0.92 |
| 12 | 0.92 | 0.88 | 0.92 |

Table 8.F.7 Classification Accuracy and Consistency—Reported Composite and Overall Scores

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Grade Level** | **Oral Language Accuracy** | **Oral Language Consistency** | **Written Language Accuracy** | **Written Language Consistency** | **Overall Accuracy** | **Overall Consistency** |
| Kindergarten | 0.75 | 0.66 | 0.78 | 0.70 | 0.79 | 0.72 |
| 1 | 0.70 | 0.60 | 0.80 | 0.72 | 0.80 | 0.73 |
| 2 | 0.72 | 0.63 | 0.78 | 0.70 | 0.82 | 0.74 |
| 3 | 0.72 | 0.63 | 0.77 | 0.69 | 0.79 | 0.71 |
| 4 | 0.74 | 0.66 | 0.76 | 0.67 | 0.79 | 0.71 |
| 5 | 0.76 | 0.68 | 0.74 | 0.65 | 0.80 | 0.72 |
| 6 | 0.75 | 0.67 | 0.74 | 0.65 | 0.79 | 0.71 |
| 7 | 0.75 | 0.68 | 0.74 | 0.64 | 0.79 | 0.72 |
| 8 | 0.76 | 0.69 | 0.74 | 0.64 | 0.81 | 0.73 |
| 9 | 0.71 | 0.65 | 0.76 | 0.67 | 0.79 | 0.71 |
| 10 | 0.74 | 0.67 | 0.74 | 0.66 | 0.80 | 0.72 |
| 11 | 0.74 | 0.66 | 0.75 | 0.66 | 0.80 | 0.72 |
| 12 | 0.74 | 0.66 | 0.75 | 0.68 | 0.80 | 0.72 |

## Quality-Control Procedures

The California Department of Education (CDE) and ETS implemented rigorous quality-control procedures throughout the assessment development, administration, scoring, analyses, and reporting processes for the Summative English Language Proficiency Assessments for California (ELPAC). As part of this effort, ETS’ staff worked with its Office of Professional Standards Compliance, which publishes and maintains the *ETS Standards for Quality and Fairness* (ETS, 2014). These *Standards* support the goals of delivering technically sound, fair, and useful products and services; and assisting the public and auditors evaluating those products and services. Quality-control procedures are outlined in this chapter.

### Quality Control of Item Development

ETS’ goal is to provide the best standards-based and innovative items for the Summative ELPAC. Items developed for the Summative ELPAC were subject to an extensive item review process. The item writers responsible for developing Summative ELPAC items were trained in ELPAC and ETS’ policies on quality control of item content, bias and sensitivity guidelines, as well as guidelines for accessibility, to ensure that the items allow the widest possible range of students to demonstrate their abilities.

Once a draft item was accepted for authoring—that is, once it was entered into ETS’ item bank and formatted for use in an assessment—ETS employed a series of internal reviews and an initial CDE review. These reviews used established criteria and specifications to judge the quality of an item’s content and ensured that each item measured what it was intended to measure. These reviews also examined the overall quality of the test items before presentation to the CDE and item reviewers. To finish the process, a group of California educators reviewed the items for accessibility, bias and sensitivity, and content, and made recommendations for item enhancement. The details on quality control of item development are described in section [*3.5 ETS Item Review Process*](#_ETS_Item_Review).

During administrations of the Summative ELPAC, when sufficient student response data on each item became available, ETS’ Psychometric Analysis & Research (PAR) staff conducted item analyses and a key check to examine whether the items performed as expected. ETS’ psychometric staff conducted a thorough evaluation of all item statistics using the statistical criteria described in subsection [*8.2.6 Summary of Classical Item Analyses Flagging Criteria*](#_Summary_of_Classical_1) to flag items that were potentially problematic because of poor item performance, content issues, item bias, or accessibility challenges. Flagged items were then reviewed by ETS’ Assessment & Learning Technology Development (ALTD) staff, the CDE, and California educators to determine whether issues existed.

### Quality Control of Test Assembly and Delivery

The assembly of all test forms must conform to blueprints that represent a set of constraints and specifications. ETS conducted multiple levels of quality assurance (QA) checks on each assembled Summative ELPAC form to ensure it met the form-building specifications. Both ETS’ ALTD and PAR staff reviewed and signed off on the accuracy of forms before the test forms were posted for CDE review. Detailed information related to test assembly can be found in [*Chapter 4: Test Assembly*](#_Toc120802066).

In particular, the assembly of all test forms went through a certification process that involved various checks, including verifying that

* all item answers in the key were correctly identified and documented in the scoring system;
* items were scored correctly in the item bank and incorrect responses were scored as incorrect;
* all items assessed the intended standard;
* all content in the item was correct with the exception of distractors, which are intended to be incorrect;
* all items met the statistical criteria, to the extent possible;
* distractors were plausible;
* multiple-choice (MC) item options were parallel in structure;
* language was grade-level appropriate;
* no more than three MC items in a row had the same key;
* all graphics were correct (copyright, spelling, relevance, etc.);
* there were no unintended mechanical errors in grammar, spelling, punctuation, and the like; and
* items adhered to the approved style guide.

Reviews were also conducted for functionality and sequencing during the user acceptance testing (UAT) process to ensure all items functioned as expected. Three cycles of UAT were conducted: the first by the test delivery system (TDS) vendor, the second by ETS, and the third by the CDE. CDE staff made a final quality check to ensure that all issues identified during UAT were resolved before the release of the operational assessment.

#### Test Assignment

State and federal laws (California *Education Code* sections 313 and 60810 and federal law Titles I and Ill of the Every Student Succeeds Act) require that all students whose primary language is other than English be assessed for English language proficiency.

Students whose English language acquisition status (ELAS) is English learner (EL) at the beginning of the testing window or who became ELs throughout the window were determined to be eligible for the Summative ELPAC in the Test Operations Management System (TOMS). Those students who were designated as EL students must be administered the Summative ELPAC annually until they are reclassified as fluent English proficient.

Local educational agencies (LEAs) were able to access the Summative ELPAC and Summative Alternate ELPAC Student Eligibility Report in TOMS for a list of students who needed to be administered the Summative ELPAC. A student will not appear on the Summative ELPAC and Summative Alternate ELPAC Student Eligibility Report if the student is reclassified before testing or the student’s ELAS changed so the student is no longer eligible to test (CDE, 2022).

### Quality Control of Test Materials

Brief descriptions of the types of materials used for and during testing appear in the following subsections.

#### Developing Assessments

##### Computer-based Assessments

The steps taken to develop and ensure the quality of the computer-based assessments are described in [*Chapter 3: Item Development and Review*](#_Item_Development_and_1) and [*Chapter 4: Test Assembly*](#_Toc120802066).

##### Paper–Pencil Forms

Test forms and response booklets were developed and reviewed by ETS’ staff to ensure that materials met quality standards. Each document was reviewed for accuracy, completeness, and alignment with supporting materials. Print-ready PDFs underwent a stringent quality-control process to ensure that there was adequate space for student response.

#### Test Administration Manuals

ETS’ staff verified that test instruction manuals accurately matched the test materials and testing processes. Editors reviewed each document for spelling, grammar, accuracy, and adherence to CDE style. Each document was approved by the CDE before being published to the ELPAC website. Only nonsecure documents were posted to this website. Secure materials, such as the *Summative ELPAC Directions for Administration*, were made available to designated LEA staff through the TOMS, which required a secure logon.

The manuals used in the administration of the Summative ELPAC are listed in subsection [*5.3.4 Instructions for Test Administration*](#_Instructions_for_Test_2).

#### Collecting Test Materials

ETS’ processes ensure the security of assessments delivered using a variety of test modes and delivery methods.

##### Computer-based Assessments

The steps taken to develop and ensure the quality of the computer-based assessments are described in [*Chapter 3: Item Development and Review*](#_Item_Development_and_1) and [*Chapter 4: Test Assembly*](#_Toc120802066)*.*

##### Paper–Pencil Forms

LEAs returned scannable kindergarten through grade two Writing Answer Books for scoring. LEAs were also provided with instructions for secure destruction of any materials in the *Summative ELPAC Online Test Administration Manual* (CDE, 2023).

Upon receipt of the test materials, ETS’ personnel examined each shipment for a number of conditions, including physical damage, shipping errors, and omission of materials. The number of students recorded on the Group Identification Sheet (GIS)—the precoded identification sheet that accompanied the grade-level test materials for a school—was compared to the number of Answer Books returned to ETS.

#### Processing Test Materials

The ways in which materials associated with student testing were processed are described in subsequent subsections.

##### Computer-based Assessments

Computer-based assessments submitted by students were transmitted from Cambium Assessment, Inc. (CAI) to ETS each day. Each system checked for the completeness of the student record and stopped records that were identified as having an error. (For example, the system would identify a test part that was missing a content registration ID, a unique identifier that matches the student’s opportunities.)

##### Paper–Pencil Forms

When processing returned Answer Books, ETS’ image-scanning process was used to capture security information electronically and compare scorable material quantities reported on the GIS to actual documents scanned. LEAs were contacted by phone if there were any missing shipments or the quantity of materials returned was less than expected.

Upon receipt of the test materials, ETS’ personnel examined each shipment of materials by comparing the serial numbers of returned materials with those on actual documents received. LEAs were contacted by phone if there were any missing materials.

### Quality Control of Test Administration

The quality of test administration for the Summative ELPAC was monitored and controlled through several strategies.

A fully supported Outreach team that includes California Technical Assistance Center phone support and Success Agents supported all LEAs in the administration of the ELPAC. In addition to providing guidance and answering questions, the Outreach team regularly conducted campaigns on particular administration topics to ensure all LEAs understood correct test administration procedures. Outreach was guided by individuals who managed communications to LEAs; provided regional and web-based trainings; and hosted a website, [the](https://www.caaspp.org/) ELPAC website, that housed a full range of manuals, videos, and other instructional and support materials.

The quality of test administration was further managed through comprehensive rules and guidelines for maintaining the security and standardization of the ELPAC. LEAs received training on these topics and were provided tools for reporting security incidents and resolving testing discrepancies for specific testing sessions.

The ETS Office of Testing Integrity (OTI) reinforced the quality-control procedures for test administration, providing QA services for all testing programs managed by ETS. The detailed procedures the OTI developed and applied in quality control are described in subsection [*5.8.1 ETS’ Office of Testing Integrity*](#_ETS’_Office_of_1).

### Quality Control of Scoring

ETS conforms to high standards of quality and fairness when scoring assessments and reporting scores. These standards dictate that ETS provides accurate and understandable assessment results to the intended recipients. It is also ETS’ mission to provide appropriate guidelines for score interpretation and cautions about the limitations in the meaning and use of the test scores. Finally, ETS conducts analyses needed to ensure that the assessments are equitable for various demographic student groups.

#### Human Scoring

##### Scoring Process

In general, the ELPAC scoring design for Writing tasks is based on a team of 20 to 25 ETS raters that scored one task at a time under the supervision of a scoring leader. Scoring leaders were supervised by group scoring leaders. Each group scoring leader was responsible for multiple teams in a grade level or grade span.

Each rater calibrated for a task type prior to scoring any response by passing the corresponding calibration test. The team scored multiple tasks of a similar type per shift. Once all responses of the same type were scored, each rater calibrated for a new task type. A rater worked independently on the rater’s own device, read each student response and entered a score for each response.

##### Related to Raters

ETS developed a variety of procedures to control the quality of ratings and monitor the consistency of scores provided by raters. These procedures specified rater qualifications and procedures for rater certification and rater calibration. Raters were required to demonstrate their accuracy by passing a certification test before ETS assigned them to score a specific assessment and by passing a shorter, more focused calibration test before scoring. Each calibration test is valid for three days, so raters recalibrated on every fourth day or scoring session. Rater certification and calibration are key components in maintaining quality and consistency.

Scoring leaders monitored raters’ performance by reading a subset of their scored responses to determine whether the rater assigned the correct rating. Some scoring leaders chose to read the response before finding out what score the rater had assigned; others chose to know what score the rater assigned before reading the response. Refer to [*7.2.1.4 Scoring Monitoring and Quality Management*](#_Scoring_Monitoring_and_2) for more information on this process, which is called “backreading.”

In addition to backreading, validity sample responses were seeded into operational scoring to track rater accuracy. Validity responses were prescored by scoring experts who reached a consensus on the score. Evaluating raters’ agreement with consensus scores on validity responses is a measure of scoring accuracy that helps to ensure scoring quality.

Validity agreement was monitored automatically. If a rater’s validity agreement fell below a threshold determined for a task type, the rater was automatically required to complete remediation training.

##### Rater Qualification

Raters had to meet the following requirements prior to being hired:

* A bachelor’s degree was required.
* Teachers currently teaching English were preferred.
* Scoring experience was preferred.
* Graduate students and substitute teachers were encouraged to apply.
* Experience as a California educator was preferred.

Candidates completed rater training and achieved qualifications through the certification process.

All team leaders and raters were required to qualify before scoring and were informed of what they were expected to achieve to qualify. Refer to [*7.2.1.3 Rater and Scoring Leader Training*](#_Rater_and_Scoring_2) for a more complete description of this training.

ETS made a distinction between training sets and calibration (or qualification) sets. Training sets were nonconsequential, as the sets provided the raters the opportunity to score sample papers and receive feedback, including the correct score point and rationale associated with that score point and the sample paper. Training sets were a learning tool that the raters were required to complete. Nonadjacent scores could occur in the training sets, as minimum agreement standards were not part of training sets.

Upon completion of the required training sets, raters moved on to a consequential calibration set that determined rater eligibility for operational scoring of a particular item type. Calibration (qualification) sets had minimum agreement levels that were enforced, and nonadjacent scores were not allowed.

Responses in calibration (qualification) sets had been scored previously by scoring experts, who came to a consensus on the score for each response. For a rater to pass the calibration assessment, the rater had to achieve 60 percent exact agreement with the consensus scores and 0 percent discrepant scores.

The qualification process was conducted through an online system that captured the results electronically for each individual trainee.

##### Monitoring Raters

ETS’ staff created performance scoring reports so that scoring leaders could monitor the daily human-scoring process and plan any retraining activities, if needed.

For monitoring rater accuracy, scoring leaders scored a subset of responses already scored by each individual rater to determine whether raters were applying the scoring rubric and benchmarks accurately and consistently. Scoring leaders did this at a rate of approximately 10 percent and targeted raters who exhibited weaker scoring performance. Scoring leaders discussed score discrepancies on these responses using the rubric, benchmarks, or both the rubric and benchmarks. This process is referred to as backreading.

Raters also scored validity responses, which were inserted into the scoring queue such that every tenth response scored was a validity response. Validity responses were prescored by scoring experts who came to a consensus on the score. The percentage of times a rater’s score exactly matched the consensus score was an important indicator of rater accuracy. Scoring leaders used validity paper performance to provide feedback to raters during the shift, and these agreement rates were also computed over longer durations of time to assess individual raters and the overall accuracy of the rater pool.

Real-time management tools allowed everyone, from scoring leaders to content specialists, access to

* the accuracy rate on validity responses, which was defined as the percent exact agreement with consensus scores;
* the read rate, which was defined as the number of responses read per hour; and
* the projected date for completion of the scoring for a specific prompt or task.

#### Interrater Reliability Results

For monitoring interrater reliability of Writing test responses while the process was ongoing, at least 1,200 of the student responses that had already been scored by the raters were randomly selected for an independent second scoring and assigned to raters by the scoring system. The second rater was unaware of the first rater’s score. The evaluation of the response from the second rater was compared to that of the first rater.

For evaluating interrater reliability of Speaking test responses after local ratings were completed, at least 1,000 responses were scored a second time by ETS’ raters scoring online.

The statistics for interrater reliability for all items at all grade levels and grade spans are presented in table 7.2 and table 7.4 for constructed-response (CR) items in Writing and Speaking, respectively. These statistics include the percentage of exact agreement and adjacent agreement between the two raters.

While scoring was in progress, ETS also used certain criteria to monitor the consistency or reliability of scores assigned to CR Writing items that were scored by a second reader. This information was used to prompt updates to training samples and scoring notes to improve subsequent score consistency. Polytomous items were flagged if the human–human quadratic-weighted kappa was less than 0.70 or if the percent exact agreement between human ratings was less than 60 percent, 70 percent, 80 percent, or 90 percent for 4-, 3-, 2-, and 1-point items, respectively. Items that were flagged were reviewed to potentially have adjustments made to training samples or scoring notes during the scoring of responses during an administration.

#### Machine-Scoring Procedures

To ensure valid item-level scoring for the Summative ELPAC, quality-control procedures were employed by CAI, the ELPAC subcontractor responsible for providing the TDS and scoring machine-scorable items. CAI staff independently reviewed all Summative ELPAC forms by producing sample results for assessments. The sample results were compared with the answer keys for each form to confirm the accuracy of scoring keys. The scores for all applicable items were recorded. A final comparison of the test map to each computer-based form as configured in the UAT environment ensured that no changes to the form were introduced prior to operational deployment.

A real-time, quality-monitoring component was built into the TDS. After an assessment was administered to a student, the TDS passed the resulting data to the QA system. QA conducted a series of data integrity checks, ensuring, for example, that the record for each assessment contained information for each item, keys for MC items, score points in each item, and the total number of operational items. In addition, QA also checked to ensure that the test record contained no data from items that might have been invalidated.

Data passed directly from the Quality Monitoring System to the database of record, which served as the repository for all test information, and from which all test information was pulled and transmitted to ETS in a predetermined results format.

#### Development of Scoring Specifications

A number of measures were taken to ascertain that the scoring keys were applied to the student responses as intended and the student scores were computed accurately. ETS built and reviewed the scoring system models based on the reporting specifications approved by the CDE. These specifications contain detailed scoring procedures, along with the procedures for determining whether a student has attempted an assessment and whether that student’s response data should be included in the statistical analyses and calculations for computing summary data.

Prior to the test administration, ETS’ ALTD staff reviewed and verified the keys and scoring rubrics for each item. Then, these keysandrubrics were provided to CAI for implementing machine scoring of the selected-response items. Item responses to be human-scored were sent electronically to the ETS Online Network for Evaluation for scoring by trained, qualified raters. In addition, the student’s original response string was stored for data verification and auditing purposes. Standard quality inspections were performed on all data files, including the evaluation of each student data record for correctness and completeness. Student results were kept confidential and secure at all times.

ETS’ scoring specifications for the Summative ELPAC were completed, approved, and checked well in advance of the receipt of student response data. These specifications contained detailed scoring procedures, as well as the procedures for determining whether a student attempted an assessment and whether that student’s response data should be included in the statistical analyses and computing summary data.

#### Paper–Pencil Scoring

If an LEA was approved to administer the PPT version of the Summative ELPAC, student responses were entered into the Data Entry Interface (DEI) and scored electronically and by a rater, depending on the item type.

### Quality Control of Psychometric Processes

#### Scoring Verification

ETS developed two independent and parallel scoring structures to produce students’ scores: the Enterprise Score Key Management (eSKM) scoring system, which collected, scored, and delivered individual students’ scores to the ETS reporting system; and then the ETS PAR team computed individual student scores based on the same scoring specifications as described in subsection [*9.5.4 Development of Scoring Specifications*](#_Development_of_Scoring_2). The scores from the two sources were then compared for internal quality control. Any differences in the scores were discussed and resolved. All scores complied with the ETS scoring specifications and passed the parallel scoring process. This ensured the quality and accuracy of scoring and supported the transfer of scores into TOMS, the database of the student records scoring.

#### Psychometric Analyses

The psychometric procedures for the Summative ELPAC were developed, reviewed, and approved prior to the receipt of student response data. The ETS psychometric team also developed specifications for each of the psychometric analyses performed. These specifications contain detailed descriptions of the analysis steps such as sample inclusion, analyses methods, and special handling of the data.

All psychometric analyses conducted at ETS underwent comprehensive quality checks by a team of psychometricians and data analysts. Detailed checklists and psychometric specifications were developed by members of the team for each of the statistical procedures performed on Summative ELPAC results data, including item analyses, differential item functioning analyses, item response theory (IRT) calibration, equating, and scaling.

Detailed checklists were developed by members of the team for each of the statistical procedures. Classical item analyses were performed to evaluate the performance of the operational items. Classical item statistics included item difficulty and correlations between item scores and total scores. Items that were flagged for questionable statistical attributes were sent to ETS ALTD staff for review; their comments were then reviewed by the psychometricians before the review by the CDE. The ETS ALTD and PAR teams worked together to evaluate and make recommendations to the CDE about any problematic items that should be removed from IRT calibration.

IRT calibration of field test items included checks to ascertain that the input files were established accurately. Checks were also made on the number of items, number of students with valid scores, IRT item difficulty and discrimination estimates, standard errors for the item difficulty estimates, and the equating and scaling process. Two psychometricians conducted parallel calibration processing and compared the results to check for any inconsistency. Psychometricians also performed detailed reviews of relevant statistics to determine whether the chosen IRT model fits the data. ETS then presented and reviewed the calibration results with the CDE for approval.

Once raw-to-scale-score conversion tables for each form were generated, psychometricians carried out quality-control checks on each scoring table to verify

* all possible raw scores for each form were included in the tables;
* the lowest obtainable scale score and the highest obtainable scale score matched the specifications for each grade level, respectively; and
* the threshold score for the performance level was correctly identified.

After all quality-control steps were completed and any differences were resolved, one final inspection of scoring tables was conducted prior to uploading the tables to eSKM for score reporting.

### Quality Control of Reporting

To ensure the quality of Summative ELPAC results, for both individual student and summary reports, three general areas were evaluated:

1. Comparison of report formats with input sources from the CDE-approved samples
2. Validation of the report data through quality-control checks performed by ETS’ Data Quality Services and Center of Reporting & Scoring Services teams, as well as running of all Student Score Reports (SSRs) through ETS’ patented QC Interrogator software, which compares elements of the SSR to acceptable values to identify errors and is used in conjunction with human review to detect errors on every score report batch as part of quality-control procedures
3. Proofreading of the quality-control and production reports by the CDE and ETS prior to making reports available to the LEA for download in TOMS and the California Educator Reporting System as well as via the LEA’s student information system

All reports were required to include a single, accurate LEA code, an LEA name, and a school name. All elements conformed to the CDE’s official county/district/school (CDS) code and naming records. From the start of processing through scoring and reporting, the CDS Master File was used to verify and confirm accurate codes and names. The CDE provided a revised LEA Master File to ETS throughout the year as updates became available.

After the reports were validated in accordance with the CDE’s requirements, a set of reports representing all possible grade levels, domains, and reporting outcomes was provided to the CDE and ETS for review and approval. Electronic reports were sent on the actual report template to the CDE. The CDE and ETS reviewed and approved the reports after a thorough examination.

Upon the CDE’s approval of the reports generated for the quality-control LEAs, ETS proceeded with the first batch of report production. The reviewed set of reports incorporated CDE-selected LEAs and provided the final check prior to generating all reports and making them available electronically for download in TOMS and for student information systems through an application programming interface.

#### Exclusion of Student Scores from Summary Reports

Students who were identified as ELs were required to take the Summative ELPAC. In cases where an eligible student had a disability for which there were no appropriate accommodations in one or more domains, as indicated in the student’s individualized education program (IEP) or Section 504 plan, the student was exempted from testing in that domain or domains, assessed in the remaining domains in which it was possible to assess the student with designated supports or accommodations, and scored on the basis of the remaining completed domains. Domain exemptions were determined by the IEP team and assigned in the testing system for identified domains. When a domain exemption was identified, the student received a special character, a tilde (~), for any exempted domains on the student’s SSR.

Any student whose IEP team determined that the student, having the most significant cognitive disabilities, was unable to participate in the general ELPAC, even with accommodations, was assigned to take the Summative Alternate ELPAC instead of the Summative ELPAC. There were no other exclusions for the Summative ELPAC.

### Quality Control of End-to-End Testing

ETS conducted end-to-end testing prior to the start of the test administration. The purpose of this testing is to verify that all systems, processes, and resources were ready for the operational administration. Once released from processing, the test results were sent through the system for scoring and reporting. SSRs were created, along with data files for subject-matter experts in the teams to review and verify.

#### Computer-based Assessments

ETS employed a number of strategies to verify ongoing systems performance, including monitoring of system availability and system usage. Time was allotted for UAT to confirm that the systems met requirements and to make identified corrections before final deployment. To accomplish system acceptance and sign-off, ETS deployed systems to a staging area, which mirrors the final production environment, for operational testing and UAT. Final approval by the CDE triggered final deployment of the system.

To begin the quality-control process for end-to-end testing of the administration, the ETS program and resolutions teams prepared by entering responses in computer-based assessments for all grade levels and grade spans and domains. These responses were entered for fictitious students in selected schools and across several LEAs. Each student’s assessment was completed with responses that were all correct, all incorrect, and combinations of correct and incorrect. These response combinations were the expected results across performance levels and score ranges. The responses were sent for processing, including for system quality control of computer-based assessments.

Once released from processing, the test results were sent through the system for scoring and reporting. SSRs were created, along with data files for subject-matter experts in the teams to review and verify. Individual SSRs were generated on the basis of the fictitious students when 100 percent quality control was demonstrated by ETS’ Resolution staff.

#### Paper–Pencil Tests

The DEI underwent UAT to ensure that the correct test items were available for a grade-level assessment in the DEI. Then, during testing, information technology personnel monitored daily feeds to ensure the completeness and timeliness of records sent for hand scoring.

The processes followed to test the DEI from end to end are described in the previous subsection, [*9.8.1 Computer-based Assessments*](#_Computer-based_Assessments_1).

### References

California Department of Education. (2022). *The correction of classification process: At-a-glance.* California Department of Education website.

California Department of Education. (2023e). *Summative ELPAC* *online test administration manual.* Sacramento, CA: California Department of Education.

Educational Testing Service. (2014). *ETS Standards for Quality and Fairness*. Princeton, NJ: Educational Testing Service.

## Continuous Improvement

The sixth operational administration of the Summative English Language Proficiency Assessments for California (ELPAC) occurred in 2022–23. Throughout the past five years, continuous efforts have been made to improve the assessments. This chapter summarizes accomplishments and ongoing improvements for the Summative ELPAC as well as strategies to implement possible future improvements.

### 2022–23 Feedback for Continuous Improvement Survey

The ELPAC program annually solicits feedback from educators through the Feedback for Continuous Improvement Survey. Local educational agency (LEA) and test site staff, as well as test administrators and test examiners, were invited to participate in the 2022–23 Feedback for Continuous Improvement Survey. Its goal was to highlight successes and identify areas for improvement. A total of 3,869 survey respondents participated in this survey for the 2022–23 administration, compared to 4,834 respondents for the previous year. The California Department of Education (CDE) and ETS use key recommendations from educators to implement positive changes in the following administration year.

Educators provided valuable feedback for potential improvements to the future administration of the California Assessment of Student Performance and Progress (CAASPP) and the ELPAC by reporting some lessons they learned in 2021–22. Based on those lessons and suggestions for improvement, the *CAASPP and ELPAC Feedback for Continuous Improvement Survey and Focus Groups Report* (CDE, 2023) presents recommendations for the CDE, with the goal of enhancing the administrative support provided to LEAs and schools for future CAASPP and ELPAC test administrations. Refer also to subsection [*5.4.4 Feedback for Continuous Improvement Survey*](#_Feedback_for_Continuous_1) for assessment-specific results.

### Recommendations for Improvement

In response to the LEA feedback, ETS and the CDE will consider implementing the following improvements in future test administrations:

* Clarify and expand the use of universal tools, designated supports, and accommodations in daily instruction and on assessments to address respondents’ confusion regarding the assignment and use of embedded accessibility resources
* Emphasize stopping markers in materials and trainings for the Summative ELPAC
* Continue to review ELPAC items that are appropriate for young students who have received primarily remote instruction

#### Administration and Scoring Training

Feedback from LEA coordinators and test examiners within the Moodle Training Site (Moodle) was analyzed, and improvements are underway for the 2023–24 Summative ELPAC Administration and Scoring Training (AST). More than 1,200 test examiners and 350 LEA coordinators provided feedback in Moodle and made suggestions to improve training.

* Test examiners expressed that they needed more direction on required elements in Moodle. The Sacramento County Office of Education (SCOE) will create Test Examiner Checklists by grade level and grade span and post them within each course.
* Test examiners who certified across multiple grade levels and grade spans—as in the Kindergarten through Grade 5 certification course—reported that the combined quizzes were too long for a single sitting. SCOE will break up these quizzes into several smaller quizzes. Test examiners will certify on the same material but with more, smaller segments.
* Feedback on video student samples instead of audio student samples within Moodle training and calibration quizzes was overwhelmingly positive. Approximately 30 percent of the 600 student samples for the 2022–23 Summative ELPAC were video student samples. For 2023–24, SCOE will use 100 percent video student samples.
* LEA ELPAC coordinators requested the ability to rewind videos in the required certification course, so they could be navigated more quickly and easily. To make this happen, SCOE will be required to build separate checks for understanding quizzes that must be passed to complete the LEA certification courses for 2023–24.
* Streamability continues to be an issue for some test examiners. More than 35,000 test examiners streamed videos within the course. For 2023–24, all videos in the Summative ELPAC AST courses will stream through Moodle from a secure video streaming server hosted at SCOE, which will allow for streaming at various rates across various devices.
* SCOE will produce a new Grades 3–12 Group Administration video to reflect the updated changes to the test directions in *the* *Directions for Administration* made for the 2022–23 test administration year.

#### Changes to the Test Administrator Interface

The Test Administrator Interface will be updated to a cleaner, more user-friendly appearance. This will include a new functionality that allows the test examiner to pin information for specific students to the top of the screen for monitoring.

#### Changes to Ending the Assessment in the Test Delivery System

The process for ending the assessment will be streamlined. After the last item is presented, students will select [**Next**] (instead of [**End Test**]) to reach the review screen, which will include the [**Submit Test**] button.

### Student Score Reports Redesign

Redesigned SSRs will be made available; SSR formats are PDF and HTML. For an HTML SSR, an LEA or parent or student portal vendor will provide a link to a parent/guardian.

Additionally, SSRs for the ELPAC will be available in Arabic.

### Accessibility Resources

Like all ELPAC assessments, the Summative ELPAC is administered using the test delivery system (TDS) created by Cambium Assessment, Inc. As such, implementation of new computer-based universal tools, designated supports, and accommodations are aligned with the TDS.

The following changes will be implemented during the 2023–24 Summative ELPAC administration:

* The definition of the non-embedded highlighter universal tool will be updated to include test examiner assistance for kindergarten through grade two students.
* The definition of the embedded strikethrough universal tool will extend its range of grade levels to include grade two.
* The definition of the embedded line reader universal tool will extend its range of grade levels to include grade two.
* The definition of the non-embedded medical supports designated support will be updated to mention “Bluetooth hearing aids.”

### Reference

California Department of Education. (2023). *2022–23 CAASPP and ELPAC feedback for continuous improvement survey and focus groups report* [Unpublished manuscript]. Sacramento, CA: California Department of Education.

1. Data for 2022–23 was retrieved from the *CalEdFacts* web page on the CDE website. [↑](#footnote-ref-2)
2. This definition was retrieved from the CDE California Longitudinal Pupil Achievement Data System (CALPADS) web page on the CDE website. [↑](#footnote-ref-3)
3. This technical report is based on the versions of the Accessibility Matrix that was available during the 2022–23 ELPAC administration. [↑](#footnote-ref-4)
4. A Support Vector Machine (SVM) performs classification by finding the hyperplane that maximizes the margin between two classes. The vectors (cases) that define the hyperplane are the support vectors (Vapnik, 1995). The Support Vector Regression is an extension of SVMs and uses the same principles as the SVM for classification, with only a few minor differences (Drucker et al., 1996). [↑](#footnote-ref-5)