

California Department of Education

Executive Office

SBE-003 (REV. 11/2017)

itb-amard-mar25item01

# California State Board of Education March 2025 Agenda Item #02

## Subject

Update on the Implementation of the Integrated Local, State, and Federal Accountability and Continuous Improvement System: Adoption of the Science Indicator Cut Scores for Status and Change and Color Scheme for Five-by-Five Grid, and a Review of Student Growth Data.

## Type of Action

Action, Information

## Summary of the Issue(s)

The State Board of Education (SBE) adopted the 2025 Accountability Workplan at the January 2025 meeting. The California Department of Education (CDE) provided a summary of the SBE January 2025 action and 2025 Accountability Workplan timeline as an Information Memorandum in February 2025. The Accountability Workplan details the items that the CDE will present to the SBE at their March, May, and July 2025 meetings. This process ensures that there is adequate time to engage with educational partners and incorporate technical and policy changes to process student-level data and develop the resources necessary to support the annual release of the Dashboard by November 15, 2025, as required by Senate Bill 114 (Chapter 48, Statutes of 2023).

In accordance with the Accountability Workplan, the CDE is proposing action on the Science Indicator with the adoption of cut scores for status and change and five-by-five grid. The CDE will also provide an update on the release of the growth scores.

Attachment 1 includes an overview of the Growth data for Grades 4 through 8 in English Language Arts and Mathematics released on the Dashboard on January 31, 2025. Additionally, this item includes Attachment 2, which is an overview of the key decisions regarding the incorporation of the Science indicator into the Dashboard. Attachment 3 is an overview of the outreach activities completed to date in support of the Dashboard.

## Recommendation

The CDE recommends that the SBE adopt Status Cut Scores, Change Cut Scores, and Five-by-Five Color Grid for the Science Indicator.

## Brief History of Key Issues

### Background

The primary purpose of the Dashboard since it was first published in 2017 continues to be to assist local educational agencies (LEAs) in identifying strengths, weaknesses, and areas in need of improvement for the LEA and its schools. The Dashboard is used to determine LEAs in need of additional assistance or intervention based on the criteria set forth in California *Education Code* Section 52064.5. It is also used to determine schools in need of support under ESSA (i.e., Comprehensive Support and Improvement, and Targeted Support and Improvement/Additional Targeted Support and Improvement). In 2024, the Dashboard reflects a full return of California’s accountability system with the reporting of Status (current year data), Change (the difference from prior year data), and performance levels (or colors) for all state indicators.

### California School Dashboard Principles

The SBE adopted the California School Dashboard Principles (Dashboard Principles) in 2022. The Dashboard Principles are designed to guide the SBE’s work as they consider fully onboarding the Science Indicator to the Dashboard and use of growth data in the accountability system. The Dashboard Principles are used as a framework during Dashboard-related discussions and deliberations to ensure that decisions align with SBE’s policy objectives. The adopted principles are available on the California School Dashboard Principals webpage at <https://www.cde.ca.gov/ta/ac/cm/dbprinciples.asp>.

## Summary of Previous State Board of Education Discussion and Action

### Science Indicator

In March 2016, the SBE approved a design for the LCFF evaluation rubrics that includes the following key indicators: (i) student test scores on English Language Arts and Math, including a measure of individual student growth, and results on the Next Generation Science Standards (NGSS) assessment, (ii) progress of ELs toward English language proficiency; (iii) high school graduation rate; and (iv) measures of student engagement, including suspension rates by grade span and chronic absence. (<https://www.cde.ca.gov/be/ag/ag/yr16/documents/may16item02.doc>).

In March 2020, the SBE received the annual Dashboard update, which included potential revisions that the CDE was considering for the Dashboard beyond 2020, including the inclusion of the science assessment results (<https://www.cde.ca.gov/be/ag/ag/yr20/documents/mar20item05.docx>).

In March 2022, the CDE provided an update on the feasibility of when the science results could be incorporated into the Dashboard given the low participation on the science test during 2020–21, the use of the revised blueprint for the 2021–22 administration of the California Science Test (CAST), and the gaps in implementing the science instructional materials due to the challenges that schools faced because of COVID-19

(<https://www.cde.ca.gov/be/ag/ag/yr22/documents/mar22item04.docx>).

In March 2023, the CDE recommended providing a link to each school/LEA’s CAASPP science results. With two years of results from the 2021–22 and 2022–23 CAST assessments based on the revised blueprint, the CDE provided an update on the use of these results for accountability purposes and options toward inclusion of this test on the Dashboard (<https://www.cde.ca.gov/be/ag/ag/yr23/documents/mar23item03.docx>).

In March 2024, The CDE provided the SBE with a timeline for a workplan for the Science Indicator which includes six individual decision points. The workplan will be operationalized and brought to the SBE in stages for approvals from February 2024 through July 2025. (<https://www.cde.ca.gov/be/ag/ag/yr24/documents/mar24item02.docx>)

In July 2024, the SBE approved a metric to measure science assessment performance for use on the Dashboard. The following decisions were made: (i) distance from standard would be the unit of measure; current year scores will be used for high school results; and a participation rate requirement will begin with the 2025 dashboard. (<https://www.cde.ca.gov/be/ag/ag/yr24/documents/jul24item02.docx>)

In January 2025, the SBE approved the Accountability Workplan for 2025 which included the incorporation of the Science indicator into the Dashboard using the remaining key decisions: (2) Approval of Status Cut Points (3) Approval of Change Cut Points, and (4) Approval of a Color Scheme for the Five-by-Five Color Grid, (5) Inclusion of the Indicator within the State Accountability System through Differentiated Assistance Criteria, and (6) Inclusion of the Indicator within the Federal Accountability System through ESSA Eligibility Identification. (<https://www.cde.ca.gov/be/ag/ag/yr25/documents/jan25item03.docx>)

### Growth Data for Accountability

In a June 2016 Information Memorandum, the CDE provided a progress update and clarified key issues related to the design of a school- and district-level accountability model, as opposed to reporting individual student-level growth and performance (<https://www.cde.ca.gov/be/pn/im/documents/memo-dsib-amard-jun16item01.doc>).

In February 2016, the SBE received an Information Memorandum that provided an overview of student-level growth models that can be used to communicate Smarter Balanced Summative Assessment results (<https://www.cde.ca.gov/be/pn/im/documents/memo-dsib-amard-feb16item01.doc>).

In January 2017, the SBE discussed criteria for selecting a growth model used for school and district accountability (<https://www.cde.ca.gov/be/ag/ag/yr17/documents/jan17item02.doc>).

Following the SBE discussion in January 2017, the CDE further consulted with Educational Testing Service (ETS), the Technical Design Group, the California Assessment of Student Performance and Progress (CAASPP) Technical Advisory Group (TAG), and the Statewide Assessment Stakeholder Group, regarding potential growth models. Three models were selected for simulation. The discussion and recommendations of the groups were summarized and presented to the SBE in a June 2017 Information Memorandum

(<https://www.cde.ca.gov/be/pn/im/documents/memo-asb-adad-jun17item03.doc>).

In February 2018, the SBE received an Information Memorandum with the results of the ETS Growth Study, which provided a statistical analysis of three proposed growth models

(<https://www.cde.ca.gov/be/pn/im/documents/memo-pptb-amard-feb18item01.docx>).

In May 2018, the SBE reviewed analyses of the three student-level growth models conducted by ETS and directed the CDE to further explore the Residual Gain model for possible inclusion in the Dashboard (<https://www.cde.ca.gov/be/ag/ag/yr18/documents/may18item02.docx>).

At its July 2018 meeting, the SBE directed the CDE to conduct further analyses on the Residual Growth model, including the impact of future years of assessment data, changes in the model to reduce year-to-year volatility, consideration of additional growth models or options, and an examination of growth models implemented in other states (<https://www.cde.ca.gov/be/ag/ag/yr18/documents/jul18item01.docx>).

The CDE engaged the California Comprehensive Center to conduct research and facilitate a stakeholder process on the future direction of this work. In February 2019, the SBE received an Information Memorandum, providing a summary of the first student growth model stakeholder meeting

(<https://www.cde.ca.gov/be/pn/im/documents/memo-pptb-amard-feb19item03.docx>).

In April 2019, the SBE received an Information Memorandum, providing a summary of the second growth model stakeholder feedback group meeting (<https://www.cde.ca.gov/be/pn/im/documents/memo-pptb-amard-apr19item02.docx>).

In November 2019, the SBE received an Information Memorandum, providing a summary of the growth model stakeholder feedback group process (<https://www.cde.ca.gov/be/pn/im/documents/nov19memoamard01.docx>).

At the March 2020 meeting, the SBE directed the CDE to provide a presentation at the May 2020 meeting regarding the work conducted to date on the development of a student-level growth model. Due to the national health crisis, this presentation was postponed until the July 2020 SBE meeting (<https://www.cde.ca.gov/be/ag/ag/yr20/documents/mar20item05.docx>).

In June 2020, the SBE received an Information Memorandum, providing the history and background on the student growth model work to date (<https://www.cde.ca.gov/be/pn/im/documents/memo-imb-amard-june20item01.docx>).

At the July 2020 SBE meeting, the CDE provided a presentation regarding the work conducted to data on the development of a student-level growth model (<https://www.cde.ca.gov/be/ag/ag/yr20/documents/jul20item02.docx>).

In September 2020, the CDE presented an update on the progress by the CDE on refining the statistical methodology used to develop a student growth model. In addition, the ETS presented the results of its study on the potential of the EBLP method to estimate aggregate growth measures for LEAs and schools (<https://www.cde.ca.gov/be/ag/ag/yr20/documents/sep20item02.docx>).

In November 2020, the CDE presented an item recommending that the SBE adopt a single subject Empirical Best Linear Prediction (EBLP) methodology to improve growth model communication (<https://www.cde.ca.gov/be/ag/ag/yr20/documents/nov20item06.docx>).

In February 2021, the SBE received an Information Memorandum, providing the final ETS report on the student growth model and recommendations for criteria for determining the assignment of the EBLP or simple average (<https://www.cde.ca.gov/be/pn/im/documents/feb21memoamard02.docx>).

In May 2021, the SBE adopted the student growth model methodology, which includes using residual gain (RG) scores and the EBLP hybrid approach to report aggregated student growth

(<https://www.cde.ca.gov/be/ag/ag/yr21/documents/may21item03.docx>).

In October 2021, the SBE received an Information Memorandum with information on CDE’s September 2021 release of historical growth scores from 2016–19, as well as a timeline for next release of growth scores from 2021–24 (<https://www.cde.ca.gov/be/pn/im/documents/oct21memoamard01.docx>).

In January 2022, the SBE was provided a December 2021 Information Memorandum on data reporting for the 2020–21 school year (<https://www.cde.ca.gov/be/pn/im/documents/dec21memoamard01.docx>).

In February 2022, the SBE received an update on the exploration into reporting academic student growth by English Language Proficiency Assessments for California Achievement Level

(<https://www.cde.ca.gov/be/pn/im/infomemofeb2022.asp>).

In March 2022, the SBE received an annual update on items that were being considered by the CDE for the 2022 Dashboard (<https://www.cde.ca.gov/be/ag/ag/yr22/documents/mar22item04.docx>).

In July 2022, the CDE presented an update on the Implementation of the Integrated Local, State, and Federal Accountability and Continuous Improvement System (<https://www.cde.ca.gov/be/ag/ag/yr22/documents/jul22item02.docx>).

In March 2023, the CDE reported about the communications toolkit and its purpose. Additionally, the CDE works with California’s assessment contractor, ETS, to evaluate and analyze visualizations and communications tools to appropriately display growth data to multiple audiences. The CDE continues to solicit feedback from focus groups, educational partners, and the SBE on the best approach to display these data and communicate about the approved methodology in the future (<https://www.cde.ca.gov/be/ag/ag/yr23/documents/mar23item03.docx>).

In September 2023, the CDE provides a workplan for 2023 about the student growth model for California’s schools and LEAs. It includes identifying key audiences, receiving feedback from focus groups, CPAG, and TDG, and an anticipated date which average growth scores can be officially reported is December 2024 (<https://www.cde.ca.gov/be/ag/ag/yr23/documents/sep23item08.docx>).

In March 2024, The CDE provided information regarding the Growth Model incorporation in the 2024 Dashboard. Additionally, the CDE presented a communications webpage to support educational communities.

(<https://www.cde.ca.gov/be/ag/ag/yr24/documents/mar24item02.docx>).

In January 2025, the CDE provided an overview of the 2025 Accountability Workplan which included an incorporation of the Student-Level Growth Model for Grades 4 through 8 in English Language Arts and Mathematics into the Dashboard. The CDE sought direction about the potential incorporation of the results into the California School Dashboard. (<https://www.cde.ca.gov/be/ag/ag/yr25/documents/jan25item03.docx>)

## Fiscal Analysis (as appropriate)

California’s total kindergarten through grade twelve funding within the 2024–25 California Budget Act is $133.8 billion from the following sources:

* State: $81.8 billion (61.1 percent)
* Federal: $8.1 billion (6.1 percent)
* Local: $42.5 billion (31.8 percent)
* Lottery $1.4 (1.0 percent)

The Every Student Succeeds Act funds are also typically a portion of the total federal funding amount.

## Attachment(s)

* Attachment 1: Incorporation of the Student-Level Growth Data for Grades 4 through 8 in English Language Arts and Mathematics into the Dashboard (3 Pages)
* Attachment 2: Setting Cut Points for Status and Change and Establishing the Performance Level Color Scheme for the Five-by-Five Grid for the Science Indicator (18 Pages)
* Attachment 3: California School Dashboard Educational Outreach Activities (2 Pages)

# Attachment 1 Incorporation of the Student-Level Growth Data for Grades 4 through 8 in English Language Arts and Mathematics into the Dashboard

The California Department of Education (CDE) has spent the past decade preparing to release student-level growth data, including presenting 26 Information Memoranda and Items on growth to the State Board of Education (SBE). Note: for a full summary of the 26 Items and Information Memoranda, please see the background section of this item. To ensure that the release included a valid and reliable measurement of growth, there were multiple pauses to this work, first to find solutions to validity issues, and second to wait for data to be ready after the delay caused by the pandemic (and the suspension of assessments during this period). The catalyst of this current effort came when the SBE adopted a methodology for calculating a student-level growth for students in grades 4 through 8 in both English Language Arts (ELA) and Mathematics (Math) at its May 2021 meeting (<https://www.cde.ca.gov/be/ag/ag/yr21/documents/may21item03.docx>), and set California on a path to publishing student-level growth data following the 2023-24 school year.

On January 31, 2025, the CDE released the first set of growth data based on the California Assessment of Student Performance and Progress (CAASPP) assessment results from the 2021–22, 2022–23 and 2023–24 school years. To support LEAs and education partners with this release, the CDE updated the long-existing growth webpages and frequently asked questions, webinars, as well as online question and answer sessions.

During the March 2025 SBE board meeting, both CDE and Educational Testing Service (ETS) will present the growth data from schools, districts and student groups available on the California School Dashboard (Dashboard), and the SBE will be asked to provide direction of the incorporation of the results into the 2025 Dashboard. Katherine Castellano, Principal Research Scientist at the ETS Research Institute, will review the steps to date in adopting a student growth model in California and describe details of the growth scores, including how to interpret them.

## Dashboard Principles

This work aligns with the following Dashboard Principles:

* Principle 2: Reports opportunity and performance gaps among student groups through the Equity Report that is available for each state indicator.
* Principle 4: Values each indicator equally.
* Principle 5: Values high performance and growth equally.
* Principle 8: Reflects technical quality through measures that are valid and reliable.
* Principle 11: Is subject to continuous revision and improvement.

## 2025 Workplan for the Incorporation of Student-Level Growth Data into the Dashboard

The CDE has collaborated with ETS since 2015 to develop an academic growth model, aggregate measures of student academic growth, and growth data reporting prototypes on behalf of the SBE.

To support educators, families, and the public, the CDE continued to develop communication materials to assist the public with the interpretations and purpose of the student level growth data. CDE initiated this work in the Fall of 2021 when it created a communications toolkit and hosted an informational webinar on the growth model to coincide with the release of historical student growth data. The goal of the data release was to familiarize school and local educational agency (LEA) staff with growth data and the methodology adopted by SBE.

This data released allowed the CDE and ETS to begin work on a communication plan for three key audiences in preparation for the release of growth data for informational purposes on the 2024 Dashboard:

* Audience 1: Parents, guardians, teachers, policymakers, public,
* Audience 2: School and LEA data administrators, and
* Audience 3: Data professionals

ETS’s work with multiple focus groups throughout 2023 provided guidance to finalize language, scales and visualizations that were clear and easy for parents, guardians, teachers, policymakers and the general public to understand. CDE provided the SBE an update on the engagement work with these audiences throughout 2023 at their September 2023 Meeting (<https://www.cde.ca.gov/be/ag/ag/yr23/documents/sep23item08a3.docx>).

Based on the body of work done between 2021 and 2024, CDE updated the 2024 Dashboard with full visualizations and growth score data for schools, districts and student group levels on January 31, 2025.

CDE is requesting additional guidance from the SBE on the intended use of the data in 2025 and beyond. Some of the possibilities that have been discussed in past years for CDE to explore include:

1. Turning ELA and Mathematics Growth Data into Full Indicators on the Dashboard
2. Modifying the Components of the Existing Academic Indicators for ELA and Math to Include Growth Data
3. Modifying Differentiated Assistance Criteria to Include the ELA and Math Growth Data
4. Adoption of Performance Standards and Continuing to Publish Growth Data as Additional Information on the Dashboard with no Accountability Implications

The calculation of the ELA and math growth data is dependent on multiple processes across both our testing vendor, ETS, as well as CDE data teams. These processes currently require a 10-week timeline to produce the growth data files upon receipt of the final testing results each September. Additionally, the new legislative requirement to publish the Dashboard annually by October 15 beginning in 2026 further limits the options to utilize growth data within the Dashboard indicators or for use in Differentiated Assistance eligibility. Given these timing and legislative limitations, the CDE does not see a path forward in the implementation of Options 1, 2 or 3.

Therefore, the CDE is seeking feedback from the SBE on Option 4, and any additional options they would like the CDE to explore further.

## Performance Levels for Growth

With the release of the growth data on the 2024 Dashboard, the SBE has information to be able to move forward with the establishment of performance levels for growth data. CDE is seeking feedback on the data analysis that SBE would like to review at their May 2025 SBE meeting.

# Attachment 2 Setting Cut Points for Status and Change and Establishing the Performance Level Color Scheme for the Five-by-Five Grid for the Science Indicator

In July 2024, the State Board of Education (SBE) adopted the methodology and reporting for the Science Indicator based on the 2021–22 and 2022–23 school year results from the California Science Test (CAST) and California Alternate Assessment for Science (CAA-Science). The 2024 California School Dashboard (Dashboard) included the Science Indicator for informational purposes, which has raised the visibility and awareness of the new indicator throughout the state. The indicator included a display of current and prior year data using a distance from standard methodology. The SBE adopted a participation rate expectation of 95 percent to be incorporated into the status calculation beginning with the 2025 Dashboard.

The 2025 Accountability Workplan adopted by the SBE at their January meeting includes the incorporation of the Science Assessment results into the 2025 Dashboard. The next steps in this process are for the SBE to review the distributions of the prior year data to set cut scores for status and change and select from two options a five-by-five color grid. Pending action on these items by the SBE, the CDE will then review the options for incorporating the Science Indicator in the Local Control Funding Formula Differentiated Assistance eligibility determinations for action at the July SBE meeting.

## Dashboard Principles

The work on this state indicator aligns with the following Dashboard Principles:

* Principle 5: Values high performance and growth equally.
* Principle 8: Reflects technical quality through measures that are valid and reliable.
* Principle 11: Is subject to continuous revision and improvement.

## 2025 Workplan for the Science Indicator and the Dashboard

Following the approval of the Science Indicator methodology at the July 2024 SBE meeting, the first Science Indicator results were included for informational purposes only on the 2024 Dashboard.

There are several remaining decision points and options for the SBE to consider for incorporating Science into the Dashboard:

* Approval of Science Indicator Status Cut Points: five Status levels of performance (i.e., Very High, High, Medium, Low, and Very Low).
* Approval of Science Indicator Change Cut Points: five Change levels of performance (i.e., declines significantly, declined, maintained, increased, and increased significantly).
* Approval of a Science Indicator Color Scheme for the Five-by-Five Color Grid

Information on the review of the methodology for establishing cut points for status and change and establishing a performance level scheme for the five-by-grid was presented in an Information Memorandum provided to the SBE in June 2023 [https://www.cde.ca.gov/be/pn/im/documents/jun23memoamard01.docx](https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwww.cde.ca.gov%2Fbe%2Fpn%2Fim%2Fdocuments%2Fjun23memoamard01.docx&wdOrigin=BROWSELINK).

Upon adoption of these three elements, performance levels will be available to report in the Science Indicator for the 2025 Dashboard, as directed by the SBE.

## Setting Status Cut Scores for the Science Indicator

Status, across all indicators on the Dashboard, is determined using the current year performance. The Science Indicator status score distributions utilize statewide assessment (California Assessment of Student Performance and Progress [CAASPP]) results from the CAST and CAA for Science. Scale score ranges from these tests are available in Tables 1 and 2. Three years of data are available to assist with setting the status cut scores for the Science Indicator: 2021–22, 2022–23 and 2023–24.

### Table 1: CAST Scale Score Ranges

| **Grade** | **Level 1 Standard Not Met** | **Level 2 Standard**  **Nearly Met** | **Level 3 Standard Met** | **Level 4 Standard Exceeded** |
| --- | --- | --- | --- | --- |
| **Grade 5** | 150–178 | 179–213 | 214–230 | 231–250 |
| **Grade 8** | 350–377 | 378–414 | 415–432 | 433–450 |
| **Grades 10–12** | 550–575 | 576–614 | 615–635 | 636–650 |

### Table 2: CAA For Science Scale Score Ranges

| **Grade** | **Level 1** | **Level 2** | **Level 3** |
| --- | --- | --- | --- |
| **Grade 5** | 500-544 | 545-559 | 560-599 |
| **Grade 8** | 800-844 | 845-859 | 860-899 |
| **Grades 10–12** | 900-944 | 945-959 | 960-999 |

## Distance from Standard

The SBE adopted the use of distance from standard (DFS) from the lowest scale score for Level 3 on the CAST, shown in Table 3, or converted CAA scores, shown in Table 4, at the July 2024 meeting as the metric for the Science Indicator.

### Table 3: Science DFS Equivalent for CAST Scale Score Ranges

| **Grade** | **Level 1 DFS**  **Equivalent** | **Level 2 DFS**  **Equivalent** | **Level 3 DFS**  **Equivalent** | **Level 4 DFS**  **Equivalent** |
| --- | --- | --- | --- | --- |
| **Grade 5** | (-64)–(-36) | (-35)–(-1) | 0–16 | 17–36 |
| **Grade 8** | (-65)–(-38) | (-37)–(-1) | 0–17 | 18–35 |
| **Grades 10–12** | (-65)–(-40) | (-39)–(-1) | 0–20 | 21–35 |

### Table 4: Science DFS Equivalent for CAA Scale Score Ranges

| **Grade** | **Level 1 DFS Equivalent** | **Level 2 DFS Equivalent** | **Level 3 DFS Equivalent** |
| --- | --- | --- | --- |
| **Grade 5** | -36 | -1 | 16 |
| **Grade 8** | -38 | -1 | 17 |
| **Grades 10–12** | -40 | -1 | 20 |

## Science Points

Following the SBE July 2024 decision to adopt DFS as the metric for Science, CDE received feedback from the field about the challenge to communicate the established Academic-English Languages Arts (ELA) and Academic-Mathematics Indicators and its DFS scale and the new DFS scale for the Science Indicator which is distinct from the Academic measures. As a reminder, the scale for ELA/Mathematics assessments are different for every grade but range from 467 points to 617 points. The Science assessment has 100 scale score points available for every grade the assessment is administered.

In considering the adoption of DFS in July 2024, the CDE shared with the SBE the following concerns from the Technology Design Group (TDG). Specifically, the TDG observed that the scores for DFS were clustered together and not spread across the full range of 100 possible scores, which would cause issues in setting status cut scores. The TDG expressed additional concerns due to the confusion that could be caused among wide ELA/Mathematics scale expectations and narrow Science scale score expectations. Since the scale length for ELA/Mathematics can exceed 600 points, but the Science scale length is only 100 points, the two-point measures were not considered to be comparable to each other.

In response to these concerns, the initial rollout of the data on the Dashboard separated the indicators from each other, with the Science Indicator at the bottom of the landing page for the Dashboard (and not in the same area as the Academic measures). Additional resources such as flyers and materials were created to emphasize the differences across these Indicators.

To provide clarity to the field and to ensure that the DFS score ranges are not used for comparison purposes between the ELA/Mathematics and Science Indicators, the CDE proposes a distinct metric for the Science Indicator that sustains the SBE’s scale score metric from DFS yet creates a new scale that fits the unique nature of the Science assessments. This proposed scale adjusts the reference point used by DFS from the lowest point value of Level 3 (Standard Met) to a new reference point for Science points which is the lowest point value of Level 1 (Standard Not Met). This transforms the range of the scale from -64 to 36 to a scale of 0 to 100.

### Table 5: Science Points Equivalent for CAST Scale Score Ranges

| **Grade** | **Level 1 Science Point**  **Equivalent** | **Level 2 Science Point**  **Equivalent** | **Level 3 Science Point**  **Equivalent** | **Level 4 Science Point**  **Equivalent** |
| --- | --- | --- | --- | --- |
| **Grade 5** | 0–28 | 29–63 | 64–80 | 81–100 |
| **Grade 8** | 0–27 | 28–64 | 65–82 | 83–100 |
| **Grades 10–12** | 0–25 | 26–64 | 65–85 | 86–100 |

### Table 6: Science Points Equivalent for CAA Scale Score Ranges

| **Grade** | **Level 1 Science Point**  **Equivalent** | **Level 2 Science Point**  **Equivalent** | **Level 3 Science Point**  **Equivalent** |
| --- | --- | --- | --- |
| **Grade 5** | 28 | 63 | 80 |
| **Grade 8** | 27 | 64 | 82 |
| **Grades 10–12** | 25 | 64 | 85 |

## Methodology for Setting Status Cut Scores

To set cut scores for status, the distribution of all local educational agencies (LEA) aggregate scores was ordered from highest to lowest to aid in the selection of four cut points. These cut points will create five “Status” levels which are:

* Very High
* High
* Medium
* Low
* Very Low

The first of the five status cut points set is the lowest achievable cut point, which is “Very Low”. This status level signifies the status level that is representative of the bottom 5 to 10 percent of the LEA distribution.

The next status cut point set is that of “High”. This status level signifies the status level that is the goal for the state, and a level of achievement that is representative of at least the 60th percentile and above distribution.

The remaining cut points for status are set around these established levels, with a goal of the “Medium” status level to include the largest portion of the distribution and create a normal distribution.

## Status Distributions for Science

Tables 7 and 8 provide the distribution of aggregated DFS for districts, charter schools and county offices of education (COEs) with at least 30 students with Science scores in the 2021–22, 2022–23, and 2023–24 school years. Table 7 provides the results without a participation rate penalty included in the aggregate score, while Table 8 incorporates the penalty.

### Table 7. Science DFS distributions without the participation rate penalty for all districts, charters, and COEs for Status.

| **Percentile** | **2023–24 DFS**  **(n=1,786)** | **2022–23 DFS**  **(n=1,838)** | **2021–22 DFS**  **(n=1,879)** |
| --- | --- | --- | --- |
| 5 | -26.0 | -27.0 | -27.3 |
| 10 | -23.8 | -24.2 | -24.4 |
| 15 | -22.6 | -22.3 | -22.7 |
| 20 | -21.2 | -21.0 | -21.5 |
| 25 | -19.7 | -20.1 | -20.4 |
| 30 | -18.5 | -18.9 | -19.3 |
| 35 | -17.3 | -17.8 | -18.1 |
| 40 | -16.4 | -16.7 | -17.1 |
| 45 | -15.3 | -15.7 | -16.0 |
| 50 | -14.1 | -14.7 | -14.8 |
| 55 | -12.8 | -13.5 | -13.4 |
| 60 | -11.6 | -12.3 | -12.1 |
| 65 | -10.2 | -10.7 | -10.4 |
| 70 | -8.7 | -9.3 | -9.2 |
| 75 | -7.0 | -7.7 | -7.8 |
| 80 | -5.3 | -6.0 | -6.0 |
| 85 | -3.4 | -4.2 | -3.7 |
| 90 | -0.3 | -1.2 | -0.8 |
| 95 | 3.6 | 3.0 | 3.0 |

### Table 8. Science DFS distributions with the participation rate penalty for all districts, charters, and COEs with a performance level.

| **Percentile** | **2023–24 DFS**  **(n=1,818)** | **2022–23 DFS**  **(n=1,883)** | **2021–22 DFS**  **(n=1,921)** |
| --- | --- | --- | --- |
| 5 | -28.6 | -29.4 | -32.3 |
| 10 | -25.5 | -26.0 | -27.5 |
| 15 | -23.5 | -23.8 | -25.3 |
| 20 | -22.1 | -22.3 | -23.6 |
| 25 | -20.7 | -20.9 | -22.3 |
| 30 | -19.5 | -19.9 | -21.0 |
| 35 | -18.2 | -18.6 | -20.0 |
| 40 | -17.1 | -17.5 | -18.8 |
| 45 | -16.1 | -16.4 | -17.5 |
| 50 | -14.8 | -15.4 | -16.4 |
| 55 | -13.6 | -14.3 | -15.3 |
| 60 | -12.2 | -13.0 | -13.6 |
| 65 | -10.9 | -11.5 | -12.2 |
| 70 | -9.3 | -9.8 | -10.3 |
| 75 | -7.7 | -8.4 | -8.9 |
| 80 | -6.0 | -6.4 | -7.0 |
| 85 | -3.7 | -4.6 | -4.7 |
| 90 | -0.7 | -1.6 | -1.9 |
| 95 | 3.2 | 2.6 | 2.0 |

Tables 9 and 10 provides the distribution of aggregated Science Points for districts, charter schools and county offices of education (COEs) with at least 30 students with Science scores in the 2021–22, 2022–23, and 2023–24 school years. Table 9 provides the results without a participation rate penalty included in the aggregate score, while Table 10 incorporates the penalty.

### Table 9. Science Points distributions without the participation rate penalty for all districts, charters, and COEs for Status.

| **Percentile** | **2023–24 Science Points**  **(n=1,786)** | **2022–23 Science Points**  **(n=1,838)** | **2021–22 Science Points**  **(n=1,879)** |
| --- | --- | --- | --- |
| 5 | 39.0 | 38 | 37.7 |
| 10 | 41.2 | 40.8 | 40.6 |
| 15 | 42.4 | 42.7 | 42.3 |
| 20 | 43.8 | 44.0 | 43.5 |
| 25 | 45.3 | 44.9 | 44.6 |
| 30 | 46.5 | 46.1 | 45.7 |
| 35 | 47.7 | 47.2 | 46.9 |
| 40 | 48.6 | 48.3 | 47.9 |
| 45 | 49.7 | 49.3 | 49.0 |
| 50 | 50.9 | 50.3 | 50.2 |
| 55 | 52.2 | 51.5 | 51.6 |
| 60 | 53.4 | 52.7 | 52.9 |
| 65 | 54.8 | 54.3 | 54.6 |
| 70 | 56.3 | 55.7 | 55.8 |
| 75 | 58.0 | 57.3 | 57.2 |
| 80 | 59.7 | 59.0 | 59.0 |
| 85 | 61.6 | 60.8 | 61.3 |
| 90 | 64.7 | 63.8 | 64.2 |
| 95 | 68.6 | 68.0 | 68.0 |

### Table 10. Science Points distributions with the participation rate penalty for all districts, charters, and COEs with a performance level.

| **Percentile** | **2023–24 Science Points**  **(n=1,818)** | **2022–23 Science Points**  **(n=1,883)** | **2021–22 Science Points**  **(n=1,921)** |
| --- | --- | --- | --- |
| 5 | 36.4 | 35.6 | 32.7 |
| 10 | 39.5 | 39.0 | 37.5 |
| 15 | 41.5 | 41.2 | 39.7 |
| 20 | 42.9 | 42.7 | 41.4 |
| 25 | 44.3 | 44.1 | 42.7 |
| 30 | 45.5 | 45.1 | 44.0 |
| 35 | 46.8 | 46.4 | 45.0 |
| 40 | 47.9 | 47.5 | 46.2 |
| 45 | 48.9 | 48.6 | 47.5 |
| 50 | 50.2 | 49.6 | 48.6 |
| 55 | 51.4 | 50.7 | 49.7 |
| 60 | 52.8 | 52.0 | 51.4 |
| 65 | 54.1 | 53.5 | 52.8 |
| 70 | 55.7 | 55.2 | 54.7 |
| 75 | 57.3 | 56.6 | 56.1 |
| 80 | 59.0 | 58.6 | 58.0 |
| 85 | 61.3 | 60.4 | 60.3 |
| 90 | 64.3 | 63.4 | 63.1 |
| 95 | 68.2 | 67.6 | 67.0 |

## Suggested Cut Scores for Status

After observing the distributions for LEAs across multiple years of data, CDE recommends that the SBE adopt the status cut scores as shown in Table 11.

### Table 11. Suggested Status Cut Scores for Science Indicator

| **Status Level** | **Status Cut Score** |
| --- | --- |
| Very Low | 34.9 science points or fewer |
| Low | 35.0 to 44.9 science points |
| Medium | 45.0 to 54.9 science points |
| High | 55.0 to 64.9 science points |
| Very High | 65.0 science points or more |

Table 12 provides an overlay of the cut scores on the results from the most recent year of testing, 2023-24, to illustrate how they would impact the distribution.

### Table 12. Overlay of Suggested Cut Scores on 2023-24 Science Points distributions with the participation rate penalty for all districts, charters, and COEs

| **Percentile** | **2023–24 Science Points**  **(n=1,818)** | **Suggested Status Level** |
| --- | --- | --- |
| 4.0 | 34.9 | Very Low |
| 4.1 | 35.0 | Low |
| 5 | 36.4 | Low |
| 10 | 39.5 | Low |
| 15 | 41.5 | Low |
| 20 | 42.9 | Low |
| 25 | 44.3 | Low |
| 27.9 | 45.0 | Medium |
| 30 | 45.5 | Medium |
| 35 | 46.8 | Medium |
| 40 | 47.9 | Medium |
| 45 | 48.9 | Medium |
| 50 | 50.2 | Medium |
| 55 | 51.4 | Medium |
| 60 | 52.8 | Medium |
| 65 | 54.1 | Medium |
| 67.9 | 55.0 | High |
| 70 | 55.7 | High |
| 75 | 57.3 | High |
| 80 | 59.0 | High |
| 85 | 61.3 | High |
| 90 | 64.3 | High |
| 91.5 | 65.0 | Very High |
| 95 | 68.2 | Very High |

## Methodology for Setting Change Cut Scores

Change is the difference between performance from the current year and the prior year (e.g., the difference between the current year Science assessment distance from standard and prior year Science assessment distance from standard.) The results for all LEAs are ordered separately from highest to lowest for positive change. Four cut points will be set, two for positive change and two for negative change, which will create the following five “Change” levels:

* Increased Significantly
* Increased
* Maintained
* Declined
* Declined Significantly

The first of five change cut points set is the lowest achievable change cut point, which is “Decreased Significantly.” This level of achievement is representative of the bottom 5 to 10 percent of the LEA distribution.

The remaining cut points for change are set after, with a goal of the “Maintained” status level to include the largest portion of the distribution equally weighted around zero to create a normal distribution.

Paralleling the process used to establish the Status Levels, the distribution of the difference between the current year Science results and prior year Science results for all LEAs are used to set the cut points. This includes the same set of County Office of Education, District and charter school science point data. The SBE’s goal was for schools and LEAs to increase their Science outcomes over time, therefore the results are ordered from largest declines to largest increases. The proposed distributions that will potentially be used to set the Change cut points in 2025, pending SBE approval, are displayed in Tables 19 and 20.

## Science Distribution Results for Change

Tables 13 and 14 show the aggregated change for districts, charter schools and county offices of education (COEs) with at least 30 students with Science scores in the 2021-22, 2022-23 and 2023-24 school years. Table 19 shows the change results without a participation rate penalty included in the aggregate score, while Table 20 incorporates the penalty.

### Table 13. Science distributions without the participation rate penalty for all districts, charters, and COEs for Change.

| **Percentile** | **2023-24 Change**  **from 2022-23**  **(n=1,786)** | **2022-23 Change**  **from 2021-22**  **(n=1,838)** |
| --- | --- | --- |
| 5 | -5.9 | -6.1 |
| 10 | -4.4 | -4.2 |
| 15 | -3.3 | -3.1 |
| 20 | -2.5 | -2.4 |
| 25 | -1.9 | -1.8 |
| 30 | -1.4 | -1.3 |
| 35 | -0.9 | -0.8 |
| 40 | -0.6 | -0.4 |
| 45 | -0.3 | -0.1 |
| 50 | 0.0 | 0.2 |
| 55 | 0.3 | 0.5 |
| 60 | 0.6 | 0.8 |
| 65 | 1.0 | 1.1 |
| 70 | 1.4 | 1.4 |
| 75 | 2.0 | 2.0 |
| 80 | 2.7 | 2.5 |
| 85 | 3.6 | 3.2 |
| 90 | 4.7 | 4.1 |
| 95 | 6.4 | 5.8 |

### Table 14. Science distributions with the participation rate penalty for all districts, charters, and COEs for Change.

| **Percentile** | **2023-24 Change**  **from 2022-23**  **(n=1,818)** | **2022-23 Change**  **from 2021-22**  **(n=1,883)** |
| --- | --- | --- |
| 5 | -6.7 | -6.1 |
| 10 | -4.7 | -3.9 |
| 15 | -3.4 | -2.9 |
| 20 | -2.5 | -2.0 |
| 25 | -1.9 | -1.3 |
| 30 | -1.3 | -0.7 |
| 35 | -0.8 | -0.2 |
| 40 | -0.5 | 0.1 |
| 45 | -0.2 | 0.5 |
| 50 | 0.1 | 0.8 |
| 55 | 0.4 | 1.2 |
| 60 | 0.7 | 1.6 |
| 65 | 1.1 | 2.0 |
| 70 | 1.6 | 2.5 |
| 75 | 2.2 | 3.1 |
| 80 | 3.1 | 3.8 |
| 85 | 4.1 | 4.7 |
| 90 | 5.3 | 6.0 |
| 95 | 7.8 | 8.1 |

## Suggested Cut Scores for Change

After observing the distributions for LEAs across multiple years of data, CDE recommends that the SBE adopt the change cut scores as shown in Table 15.

### Table 15. Suggested Change Cut Scores for Science Indicator

| **Change Level** | **Change Cut Score** |
| --- | --- |
| Declined Significantly | Declined by 5.1 points or more |
| Declined | Declined by 2.0 to 5.0 points |
| Maintained | Declined or increased by 1.9 points or fewer |
| Increased | Increased by 2.0 to 4.9 points |
| Increased Significantly | Increased by 5.0 points or more |

Table 16 provides an overlay of the cut scores on the results from the most recent year of testing, 2023-24, to illustrate how they would impact the distribution.

### Table 16. Science distributions with the participation rate penalty for all districts, charters, and COEs for Change.

| **Percentile** | **2023-24 Change**  **from 2022-23**  **(n=1,818)** | **Suggested Change Levels** |
| --- | --- | --- |
| 5 | -6.7 | Declined Significantly |
| 9 | -5.0 | Declined |
| 10 | -4.7 | Declined |
| 15 | -3.4 | Declined |
| 20 | -2.5 | Declined |
| 24.2 | -2.0 | Declined |
| 25 | -1.9 | Maintained |
| 30 | -1.3 | Maintained |
| 35 | -0.8 | Maintained |
| 40 | -0.5 | Maintained |
| 45 | -0.2 | Maintained |
| 50 | 0.1 | Maintained |
| 55 | 0.4 | Maintained |
| 60 | 0.7 | Maintained |
| 65 | 1.1 | Maintained |
| 70 | 1.6 | Maintained |
| 73.9 | 2.0 | Increased |
| 75 | 2.2 | Increased |
| 80 | 3.1 | Increased |
| 85 | 4.1 | Increased |
| 88.8 | 5.0 | Increased Significantly |
| 90 | 5.3 | Increased Significantly |
| 95 | 7.8 | Increased Significantly |

## Adjustments to Status Levels and Change Levels Over Time

California’s Every Student Succeeds Act (ESSA) State Plan adopted by the SBE established an expectation that the performance levels for state indicators would be revised every seven years based on new distributions and established an annual review process to assess progress on all indicators statewide. At the January 2025 SBE meeting, the CDE was directed to remove consideration of opening the ESSA State Plan for amendments; however, the CDE recommends that this general review of adjustments to status levels be applied to the Science Indicator. This timeframe allows for stability in the Dashboard calculations and assists LEAs, schools and student groups in meeting their year-over-year growth expectations. During the adoption of the ESSA State Plan, the SBE expressed that constantly resetting the cut points could cause confusion in the field as to what the objectives are for success across all indicators on the Dashboard.

## Setting Different Cut Scores for School Types or Grades

During the adoption of the Science Indicator methodology in 2024, the SBE expressed support for alignment of the Science Indicator, when possible, with the previously established Academic Indicators. In this context, CDE began to examine the alignment of cut score expectations across all grades. The Academic Indicators for English Language Arts and Mathematics have different cut scores for K-8 and High School due to feedback from the Technical Design Group (TDG), because the Smarter Balanced Summative Assessment results varied significantly between grades three through eight and grade eleven. Table 29 provides a summary of these distributions.

### Table 29: Math and English Language Arts Distributions

| **Grades 3-8 Cut Scores Are Used for:** | **Grade 11 Cut Scores Are Used for:** |
| --- | --- |
| Elementary School | High School (serving grades 7–12) |
| Middle School | High School District |
| K–12 School | N/A |
| Elementary School District | N/A |
| Unified School District | N/A |

In examining the differential performance across school type and district type, the TDG did not observe markedly differential performance that would require multiple sets of cut scores for Science. Therefore, CDE has prepared the data necessary to create a single set of cut scores for all schools, LEAs and student groups regardless of grades served.

## Methodology for Setting Performance Levels

The combination of an LEA’s or school’s “Status” and “Change” determines the performance category, which are represented by five ranked colors or Performance Levels:

* Blue (highest)
* Green
* Yellow
* Orange
* Red (lowest)

Each Indicator has its own distinct Performance Level color scheme for the five-by-five colored grid, which is adopted by the SBE along with the status and change cut points. Based on this grid, the SBE made the requirements for LEAs, schools and student groups to receive a blue Performance Level either a status of very high and a change level of maintained, increased or increased significantly, or a status of high and a change level of increased significantly. Conversely, an LEA, school, or student group would receive a red Performance Level with a status level of low and a change level of decreased significantly, or a status level of very low and any change level.

When different patterns of achievement have been observed across the State Indicators in different grade spans, the SBE has chosen to differentiate their respective cut points when setting both status and change. These differential five-by-fives are available within the Academic Indicator as well as the Suspension Rate Indicator.

## Academic Indicator Color Placement Grids

The SBE has adopted different five-by-five colored grids based on the amount of stability of schools and LEAs year over year. The baseline five-by-five color grid for all Indicators began with the Traditional color scheme seen in Option 1.

### Option 1: Traditional Color Scheme

| **Performance Level** | **Change:**  Declined Significantly | **Change:**  Declined | **Change:**  Maintained | **Change:**  Increased | **Change:**  Increased Significantly |
| --- | --- | --- | --- | --- | --- |
| **Status:**  Very High | Yellow | Green | Blue | Blue | Blue |
| **Status:**  High | Orange | Yellow | Green | Green | Blue |
| **Status:**  Medium | Orange | Orange | Yellow | Green | Green |
| **Status:**  Low | Red | Orange | Orange | Yellow | Yellow |
| **Status:**  Very Low | Red | Red | Red | Orange | Yellow |

Following the implementation of the Traditional color scheme on the 2017 Dashboard, LEAs and schools observed year over year instability in the change metric. The CDE and SBE took action to adopt the Balanced color scheme, as seen in Option 2, for the Academic Indicators in 2018 to negate this instability, and also adopted a “Three by Five” amendment to the “Five by Five” for small n-size populations.

### Option 2: Balanced Color Scheme

| **Performance Level** | **Change:**  Declined Significantly | **Change:**  Declined | **Change:**  Maintained | **Change:**  Increased | **Change:**  Increased Significantly |
| --- | --- | --- | --- | --- | --- |
| **Status:**  Very High | Green | Green | Blue | Blue | Blue |
| **Status:**  High | Green | Green | Green | Green | Blue |
| **Status:**  Medium | Yellow | Yellow | Yellow | Green | Green |
| **Status:**  Low | Orange | Orange | Orange | Yellow | Yellow |
| **Status:**  Very Low | Red | Red | Red | Orange | Orange |

The selection of the color scheme will complete the formation of the Science Indicator and allow schools, districts and student groups to receive a color on the Dashboard.

## Science Indicator Next Steps: State and Federal Accountability for the Science Indicator

While the adoption of components to create performance levels will allow the Science Indicator to display colors on the 2025 Dashboard, the SBE has the option to take additional action to include Science in state accountability. Following the SBE action on performance levels, the CDE will conduct additional data analysis to present to the SBE at their May and July meetings to inform their determinations on this final element:

* Choosing whether to Include the Science Indicator within the State Accountability System through Differentiated Assistance Criteria

The Local Control Funding Formula (LCFF) criteria uses results within each LCFF Priority Area for potential eligibility for Differentiated Assistance criteria. Upon approval of status cut scores, change cut scores and the selection of a color scheme for the five-by-five grid, CDE will prepare an analysis as to the impact of Science to LCFF support eligibility.

At its July 2025 meeting, SBE will be presented with the following decision points: first, they will decide which LCFF Priority Area the Science Indicator belongs within and then decide whether or how the color received for the metric would contribute toward eligibility.

Regarding the inclusion of the indicator in California’s ESSA State Plan, California began a three-year federal cycle for school eligibility with support determinations made based on the 2023 Dashboard. At the 2025 January SBE meeting, the SBE directed the CDE continue with California’s existing ESSA State Plan. Consequently, the Science indicator results will not be incorporated for the next Comprehensive Support and Improvement (CSI) and Additional Targeted Support and Improvement (ATSI) support determinations in 2026.

# Attachment 3 California School Dashboard Educational Outreach Activities

## Table 1: California Department of Education Policy Work Group Meetings

| **Date** | **Title** | **Topics** |
| --- | --- | --- |
| 1/23/25 | **Technical Design Group (TDG)** | 2024 Dashboard Release, 2025 Accountability Workplan |
| 2/19/25 | **Technical Design Group (TDG)** | 2025 Accountability Workplan |

## Table 2: Presentations at In-person Meetings/Conferences

| **Date** | **Title** | **Estimated Number of Attendees** | **Topics** |
| --- | --- | --- | --- |
| 1/9/2025 | **California County Superintendents-County Operated Schools Programs Committee** | 40 | 2024 Dashboard Release, 2025 Accountability Workplan |

## Table 3: Presentations/Virtual Meetings

| **Date** | **Title** | **Estimated Number of Attendees** | **Topics** |
| --- | --- | --- | --- |
| 1/9/2025 | **CISC Science Subgroup** | 60 | 2024 Dashboard Release, 2025 Accountability Workplan |
| 1/17/2025 | **State and Federal Program Directors** | 268 | Every Student Succeeds Act School Eligibility Criteria and Updates |

## Table 3: Presentations/Virtual Meetings (continued)

| **Date** | **Title** | **Estimated Number of Attendees** | **Topics** |
| --- | --- | --- | --- |
| 1/22/2025 | **Regional Assessment Network** | 32 | 2025 Accountability Workplan, Release of Growth Data |
| 1/22/2025 | **CISC Accountability Subcommittee** | 13 | 2025 Accountability Workplan, Release of Growth Data |
| 1/23/2025 | **Technical Design Group (TDG)** | 6 | 2025 Accountability Workplan, Review of Science Indicator Metrics |
| 1/23/2025 | **CISC Meeting** | 89 | 2025 Accountability Workplan, Release of Additional Data |
| 1/23/2025 | **Growth Data Webinar for Dashboard Coordinators** | 328 | Supporting the Release of Growth Data |
| 2/4/2025 | **Growth Data Webinar** | 258 | Supporting the Release of Growth Data |
| 2/13/2025 | **Data and Donuts** |  | Homeless Student Results on the 2024 Dashboard |
| 2/14/2025 | **State and Federal Program Directors** | 275 | Williams Act |