California Department of Education

Executive Office

SBE-002 (REV. 11/2017)

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# **MEMORANDUM**

**DATE:** April 10, 2018

**TO:** MEMBERS, State Board of Education

**FROM:** TOM TORLAKSON, State Superintendent of Public Instruction

**SUBJECT:** Update on the Development of the College/Career Indicator, Including an Overview of the Research Supporting the Current Model

## Summary of Key Issues

In fall 2018, the State Board of Education (SBE) will adopt performance levels for the College/Career Indicator (CCI) for inclusion in the 2018 California School Dashboard. To prepare the SBE for this planned action, the California Department of Education provided a February 2018 SBE Information Memorandum that reviewed the history of the CCI (<https://www.cde.ca.gov/be/pn/im/documents/memo-pptb-amard-feb18item02.docx>). At the March 2018 SBE meeting, the SBE requested a follow up Information Memorandum on the validity and reliability of the CCI. This Information Memorandum details the research that was conducted and incorporated in the development of the CCI and the rigorous vetting criteria and processes that were applied to select CCI measures.

## Attachment(s)

* Attachment 1: The College/Career Indicator: the Validity and Reliability of a Multiple Measures Indicator that Evaluates College and Career Preparedness (14 Pages)

# **Attachment 1: Validity and Reliability of the College/Career Indicator**

In 2012, Governor Jerry Brown signed into law Senate Bill (SB) 1458, which called for California’s school accountability system to expand its focus beyond standardized test scores and incorporate a broader set of measures demonstrating student achievement. The passage of SB 1458 was the catalyst for the development of the College/Career Indicator (CCI). The initial work to expand the accountability system was leveraged with the passage of Local Control Funding Formula (LCFF) legislation in 2013, which included a focus on postsecondary preparedness. As a result, the CCI was developed to capture all the high school student achievement measures specified in LCFF (a–g completion, Career Technical Education [CTE] pathway completion, Advanced Placement [AP] exams, and Smarter Balanced Summative Assessments). In September 2016, the State Board of Education (SBE) adopted the CCI as a state indicator. This Information Memorandum outlines:

* The strong research foundations of the CCI
* The rigorous criteria used to vet and select CCI measures
* The technical soundness of the methodology
* The breadth of expertise of the partners that helped inform the CCI
* The robust data demonstrating the coherence of the CCI model

## Overview of the Process

In building the CCI model, the California Department of Education (CDE):

1. Sought the expertise of the leading scholars in the field of college and career readiness in order to a build a strong research foundation and evaluation framework. These experts included:
* Dr. David Conley, University of Oregon
* Dr. Linda Darling-Hammond, Stanford University
* Dr. Michal Kurlaender, University of California, Davis
1. Applied the research findings to set placement levels (e.g., “Not Prepared”, “Approaching Prepared”, “Prepared”) for each CCI measure.
2. Engaged the Technical Design Group (TDG) to evaluate the technical soundness of the CDE’s methodology.
3. Sought the expertise of education and industry leaders to (through two advisory groups) identify and vet additional career measures for the CCI.
4. Collaborated with multiple stakeholder groups—California Practitioners Advisory Group (CPAG) and the SBE’s Advisory Commission on Special Education (ACSE), regional assessment and CTE experts—and incorporated their feedback into all recommendations brought to the SBE.

The graphic in Figure 1 illustrates this process.

**Figure 1**



The CDE has adhered to this iterative and collaborative process from the earliest stages of the CCI’s development (in 2014) through the present, as detailed in this paper.

## Research Foundations of the CCI Model

The foundation of the CCI is built upon the research of the leading experts in college and career readiness. Foremost among them is Dr. David Conley, a national leader in defining and promoting college and career readiness, with a strong focus on alignment to the common core state education standards, college and high school course content analysis, high school-college alignment and transition, and large-scale diagnosis and assessment of college readiness. At the University of Oregon, he is the director of the Center for Educational Policy Research, which is housed in the department of Educational Methodology, Policy, and Leadership. He is also co-chair of the Common Core State Standards Validation Committee and the Smarter Balanced Technical Advisory Committee. In 2014, the CDE contracted with the Educational Policy Improvement Center (EPIC), with Dr. Conley—who at the time was the center’s Chief Executive Officer—as the project lead, to provide analyses of potential measures of college and career preparedness to include in the CCI.

### **Framework for Evaluation**

Dr. Conley and EPIC staff members developed a framework—based on technical quality, stakeholder relevance, and system utility—to provide rigorous criteria by which measures could be evaluated for inclusion in the CCI. The criteria, and their descriptions, are identified in Table 1.

**Table 1. Criteria Used to Evaluate Potential Measures for Inclusion in the CCI**

| **Criterion** | **Description** |
| --- | --- |
| 1. Research base
 | Has predictive validity in forecasting postsecondary success |
| 1. Fair comparison
 | Allows for fair comparisons of subpopulations with attention paid to systematic bias |
| 1. Stability
 | Demonstrates sufficient reliability and allows trend examination over time  |
| 1. Value to students
 | Is actionable and accepted by students as an indicator of their postsecondary success |
| 1. Public understanding
 | Provides a clear picture of a school’s status or growth in a manner understood by both educators and non-educators |
| 1. Instructional sensitivity
 | Measures content, skills, and competencies that can be taught and learned in school |
| 1. Student performance
 | Emphasizes student performance, not educational processes and inputs |
| 1. Minimizes burden
 | Minimizes burden to the CDE, districts, and/or schools in terms of time and cost to implement and collect data |
| 1. Student coverage
 | Includes as many students as possible, considering conditional and universal measures and preferring scale or scalable measures over local or unique measures |
| 1. Various pathways
 | Recognizes diverse set of postsecondary pathways (e.g., college and/or career) |

Each of these criteria was applied to a broad range of measures—which the CDE had provided based on extensive stakeholder input and expert guidance from the TDG—for possible inclusion in the CCI. The measures, clustered into four general areas, are shown in Table 2.

**Table 2. CCI Clusters and Measures**

| **CCI Clusters** | **CCI Measures** |
| --- | --- |
| Advanced Coursework | * AP
* International Baccalaureate (IB)
 |
| Innovative Measures | * Metacognitive assessment
* Performance assessment[[1]](#footnote-1)
* California Seal of Bilteracy
 |
| Course Taking Behavior | * a–g subject requirements (a–g)
* CTE Pathway
 |
| Career Preparedness Assessments | * ACT WorkKeys
* National Occupational Competency Testing Institute (NOCTI)
* Industry certifications
 |

### **Application of the Framework to the Proposed CCI Measures**

Each of the proposed measures were evaluated based on the ten criteria cited in Table 1. It is important to note that EPIC’s objective at this stage was not to recommend specific measures for inclusion in the CCI but rather to identify strengths, weaknesses, and trade-offs associated with each measure. Each measure was rated on a three-point scale—strong (S), moderate (M), or weak (W)—across each of the ten criteria.

The results of the evaluations were presented in six white papers and summarized in a final report, “Measures for a College and Career Indicator: Final Report,” published at <https://www.inflexion.org/measures-for-a-college-and-career-indicator-final-report>. The analyses were also shared as an informational item with the SBE at the May 2015 SBE meeting (<https://www.cde.ca.gov/be/ag/ag/yr15/documents/may15item10.doc>) and are summarized in Table 3.

**Table 3. EPIC Evaluation of Measures of College and Career Preparedness**

| **Measures** | **Research Base** | **Fair Comparison** | **Stability** | **Value to Students** | **Publicly Understandable** | **Instructional Sensitivity** | **Student Performance** | **Minimizes Burden** | **Student Coverage** | **Various Pathways** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **AP**  | S | M | S | S | M | S | S | M | M | M |
| **IB** | S | M | S | S | M | S | S | M | M | M |
| **California State Seal of Biliteracy** | W | W | M | M | M | S | S | M | W | S |
| **a–g**  | S | M | M | S | S | S | S | S | M | M |
| **CTE Pathway** | M | M | M | M | S | S | S | S | M | M |
| **ACT WorkKeys** | M | M | M | M | M | M | S | S | M | M |
| **NOCTI** | M | M | M | M | M | S | S | M | M | M |
| **Industry Certifications** | W | W | W | S | S | S | S | W | M | M |

### **Literature Reviews**

As previously mentioned, EPIC produced six white papers detailing its findings on the selected measures. For each white paper, EPIC conducted comprehensive literature reviews examining if and how a selected measure:

* Is associated with postsecondary preparedness and success
* Has been incorporated into other systems of accountability
* Carries important tradeoffs or considerations within the context of California’s educational policy

The literature reviews examined measures related to academic knowledge as well as others measures strongly correlated with college and career preparedness and success (e.g., persistence or grit). The literature reviews were current (e.g., based on data generated within the previous ten years) and encompassed:

* Theoretical and empirical research (e.g., articles from peer-reviewed journals, books published by university presses)
* Evaluation studies (e.g., university and government reports)
* Strategies adopted or considered in other states

### **EPIC Findings**

Several important findings emerged from the research, as summarized below:

1. A multi-tiered, multi-dimensional model is a more valid representation of college and career preparedness than one relying on a single measure.
2. No one measure was rated strong or weak across all ten criteria. Dr. Conley noted that “(T)he framework’s design acknowledges that satisfaction of the above criteria is not a simple binary decision of yes or no. Analyses may sometimes place criteria in conflict with one another (e.g., a measure may have a strong research base but place an extraordinary implementation burden on schools).” This was evident in the analysis. While established accountability measures, such as AP and IB exam scores, received the highest measures for stability, measures of course-taking behavior, such as a–g and CTE course completion, rated higher on public understandability while also imposing a lower burden on the state, districts, and schools.
3. Course-taking behavior was singled out as the best predictor of college success, relatively stable over time, understood by educators and non-educators, having little additional impact on schools, and covering all students. “Measuring course-taking behaviors,” writes Dr. Conley, “has the potential to represent multiple secondary pathways. The a–g subject requirements align most immediately with the four–year college pathway. CTE course pathways are most applicable to career pathways. An integrated course pathway has the advantage of being applicable to both the college and career pathways.”
4. One additional measure—which was not rated in the study but which was addressed in EPIC’s final report to the CDE and identified as warranting future attention—was dual enrollment. Dual enrollment programs allow students to take college courses for college credit while they are still enrolled in high school. In its final report, the authors confirm its positive relationships with college aspirations, preparedness, grade point average, enrollment, persistence, and graduation. Although the report acknowledged the variation in quality among dual enrollment programs, it maintained that they “could conceivably be included in a course-taking behavior measure as an indicator of challenging coursework or as an outcome measure based on the grades students receive...”
5. The report also brought attention to biliteracy, which the Department of Labor has recognized as enhancing employment opportunities, especially within the new global economy. Innovative measures, such as the State Seal of Biliteracy, received a high system utility rating for its ability to be applied universally across all students.

Based on Dr. Conley’s research findings and the academic measures included in LCFF for high school students, the CDE moved forward with the development of a multi-measured CCI that strongly emphasizes course-taking behavior (a–g and CTE courses)—which were identified by Dr. Conley as the best predictor of college success—while also incorporating well-established accountability measures with high degrees of stability (AP and IB exam scores) as well as measures that are positively correlated with preparedness, persistence, and aspiration (dual enrollment). The next step was to determine performance levels for each of these measures, as detailed in the next section.

## Setting the Performance Levels

In 2016, to implement the LCFF focus on postsecondary preparedness and to align with the newly adopted evaluation rubrics, the CDE utilized the research of University of California (UC) Davis Professor Michal Kurlaender to conduct analyses, obtained technical guidance from the TDG, and gathered broad stakeholder feedback, to recommend placement levels for each measure in the CCI model (i.e., CDE recommended whether completion of one CCI measure alone sufficed to qualify a student as “Prepared” or whether it should be paired with an additional CCI measure).

### **Research Underpinnings**

Dr. Michal Kurlaender, a professor in the Education Department at the University of California, Davis, has conducted extensive research on the effectiveness of high school assessments—including the SAT and the Smarter Balanced Summative Assessments[[2]](#footnote-2)—to predict college success. In one early study[[3]](#footnote-3), she used postsecondary data from the California State University (CSU) and Community College campuses, along with high school assessment data for all grade eleven students in California, in order to evaluate the relationship between college course-taking behavior and the need for postsecondary remedial coursework.[[4]](#footnote-4) Her early analyses revealed the following findings:

* Students in higher level math courses are more likely to be ready for college level courses
* Students who were proficient or advanced on the mathematics high school assessments were very likely to be ready for college level courses
* Students who were advanced on the English language arts (ELA) high school assessments were very likely to be ready for college level courses.
* a–g completion alone does not ensure that students are prepared for college-level coursework, as evidenced by the high percentage of students who completed these courses and later enrolled in remedial classes in college.

Because the state assessments are an included measure for high school students in LCFF and based on Dr. Kurlaender’s findings, the CDE decided that it was appropriate to compare each proposed CCI measure against student performance on state standardized tests. The CDE worked with the TDG—along with key stakeholders across the state—to set initial placement levels for the CCI measures. The recommended placement levels were presented to the SBE in an August 2016 Information Memorandum (<https://www.cde.ca.gov/be/pn/im/documents/memo-dsib-amard-aug16item01.doc>) and are summarized below.

#### **CTE Pathway Completion**

Approximately 17 percent of students in the four-year graduation cohort were found to have completed at least one CTE Pathway. Further analyses on these students revealed that CTE Pathway completion is evenly distributed among racial and ethnic student groups, as well as among English learners, socioeconomically disadvantaged students, and students with disabilities, making this an attractive CCI measure. However, analyses showed that over 64 percent of students who completed a CTE Pathway scored “Not Ready” on the EAP for ELA. For this reason, CTE Pathway completion alone was deemed insufficient to qualify a student as “Prepared” and should be paired with an additional CCI measure.

#### **Completion of a–g Requirements**

Over 35 percent of students in the four-year graduation cohort were reported to have met a–g requirements. Among these students, 36.2 percent scored “Not Ready” on the EAP for ELA. In addition, 40 percent of students admitted to CSU campuses—almost all of whom completed a–g courses or an equivalent—were required to enroll in at least one remedial English or mathematics course. Therefore, it was determined that a–g completion alone was not a sufficient indicator of college preparedness and that it should be paired with an additional CCI measure.

#### **Advanced Placement**

Among those students who passed two AP exams, 77.3 percent scored “Ready” on the EAP for both ELA and mathematics or “Ready” in one content area and “Conditionally Ready” in the other. Given this evidence of preparedness, students who passed two AP exams were placed in the “Prepared” level. There was no need, it was concluded, to supplement the AP with an additional measure.

#### **International Baccalaureate**

Students who passed two IB exams were placed in the “Prepared” level, indicating that the IB program was rigorous and academically challenging.

#### **Dual Enrollment**

Among students who took two dual enrollment courses, 48 percent scored “Ready” on the EAP for ELA. Among those who took three dual enrollment courses, 61 percent scored “Ready.” Given the strong alignment of this measure with college preparedness, it was agreed that students who complete two semester or three quarters of college coursework with a grade of C- or better (and received college credit) should be placed in the “Prepared” level of the CCI. There was no need, it was concluded, to supplement Dual Enrollment with an additional measure.

## Data Supporting the Placement Settings

In order to demonstrate the soundness of the CCI model and its measures, the CDE conducted analyses comparing results from the Smarter Balanced Summative Assessment and performance on other CCI measures. The results, based on student data from the Class of 2016, are summarized in Table 4.

**Table 4**

| **CCI Criteria** | **Number of Prepared Students Who Met CCI Criteria**  | **ELA:****Number & Percentage of Students Who Received Level 1 or 2** | **ELA:****Number & Percentage of Students Who Received Level 3 or 4** | **Math: Number & Percentage of Students Who Received Level 1 or 2** | **Math: Number & Percentage of Students Who Received Level 3 or 4** |
| --- | --- | --- | --- | --- | --- |
| Two AP Exams | 64,818 | 2,164 (3%) | 59,071 (91%) | 7,719 (12%) | 53,325 (82%) |
| Two IB Exams | 3,868 | 141 (4%) | 3,580 (93%) | 537 (14%) | 3,163 (82%) |
| Dual Enrollment (One Year) | 725 | 79 (11%) | 609 (84%) | 262 (36%) | 431 (59%) |
| a–g *plus* Smarter Balanced Summative Assessments | 140,234 | 3,882 (3%) | 136,352 (97%) | 40,570 (29%) | 99,664 (71%) |
| a–g *plus* CTE Pathway | 35,045 | 7,009 (20%) | 26,729 (76%) | 16,591 (47%) | 17,009 (49%) |
| CTE Pathway *plus* Smarter Balanced Summative Assessments  | 35,093 | 1,258 (4%) | 33,835 (96%) | 14,091 (40%) | 21,002 (60%) |
| CTE Pathway *plus* Dual Enrollment (One Year) | 75 | 14 (19%) | 60 (80%) | 36 (48%) | 37 (49%) |

Table 4 shows that performance on the Smarter Balanced Summative Assessments positively correlates with performance on other CCI measures. For instance, 91 percent of students who received a score of 3 or higher on two AP exams also met or exceeded the standard for ELA.

**New Research Supporting the Placement Settings**

As mentioned earlier, the original performance levels were set based on EAP (and STAR) data. The Smarter Balanced Summative Assessments have since replaced the EAP for use in the CCI determinations. In March 2018, Dr. Kurlaender published a new report—“Predicting College Success: How Do Different High School Assessments Measure Up?”—which incorporates new assessment data from the Smarter Balanced Summative Assessments and its effectiveness in predicting college readiness. It describes early college outcomes for the 2014–15 cohort of California students in grade eleven, the first cohort of grade eleven students to take the Smarter Balanced Summative Assessments[[5]](#footnote-5). The findings of the study, posted at <https://edpolicyinca.org/sites/default/files/SBAC-SAT%20Paper.pdf>, are summarized below:

* The Smarter Balanced Summative Assessments are as strong a predictor of college performance at the CSU as the SAT
* Both the Smarter Balanced Summative Assessments and the SAT are strong predictors of college performance at UC Davis, although the SAT is a slightly stronger predictor of first year performance.
* The overall pattern of results holds for different student groups (race/ethnicity, socioeconomically disadvantaged, and by high school quality) at both the CSU and the UC Davis.

## Technical Soundness of the Methodology

The CDE engaged the TDG to evaluate the technical soundness of the methodology of the CCI model. The TDG is composed of the following experts in K–12 testing and assessment:

* Edward Haertel, Professor Emeritus at Stanford Graduate School of Education and a national leader in educational psychology
* Christine Hikido, Director of Research and Evaluation at Elk Grove Unified School District
* Brian Stecher, Adjunct Senior Social Scientist at the Rand Corporation
* Roger Yoho, Psychological Testing Director at Corona-Norco Unified School District
* Eric Crane, Senior Research Associate with the Innovation Studies Program at WestEd
* Dominic Zarecki, Senior Data Analyst at Fortune School of Education
* Noah Bookman, Chief Strategy Officer of the CORE Districts

The TDG reviewed several CCI models as well as different options for calculating the CCI. In addition, the TDG evaluated several methodologies for determining Status and Change cut scores for the CCI, including using an average of all students in the graduating cohort across the three CCI performance levels. At its June 2017 meeting, the TDG shared that the average methodology does not provide meaningful information for schools or the public. The TDG expressed concerns that using an average would detract from the original intent of using the CCI to provide information on the number of graduates who are prepared for college or career. Therefore, the TDG recommended that the methodology be based on the percent of students in the prepared performance level.

**Identification and Vetting of Career Measures: Convening Advisory Groups**

From the earliest stages of its work to develop CCI measures, the CDE has been, and continues to be, committed to collaborating with a broad and geographical diverse group of stakeholders, including researchers, educators, and industry leaders throughout the state. This section discusses the collaborative work undertaken to develop career measures for the CCI.

### **Research Underpinnings**

While the initial research, conducted by EPIC, emphasized college readiness measures, the CDE relied upon the research of Dr. Linda Darling Hammond, and her colleagues at the Stanford Center for Opportunity Policy in Education (SCOPE), to identify appropriate career readiness measures. In their report, “Recognizing College and Career Readiness in the California School Accountability System,” Dr. Darling-Hammond and Soung Bae proposed three types of career readiness measures for inclusion in the CCI:

1. Completion of high-quality, integrated courses of study that support career readiness, analogous to the completion of a–g courses (e.g., CTE pathways)
2. Satisfactory performance in a work-based learning experience (e.g., internships, apprenticeships) that meets specific standards, such as those adopted by the California Partnership Academies or the National Academy Foundation.
3. Achievement on career-readiness assessments (e.g., ACTWorkKeys, NOCTI Job-Ready and Pathway Assessments), including those that result in industry-approved certificates, credentials, licenses, and badges that are valued by postsecondary institutions and businesses.

In addition, the report recognized the value of student profiles in motivating students to create and pursue important goals for themselves. These profiles would accompany students when they leave high school. The report singled out the State Seal of Biliteracy as an example of an accomplishment that might warrant formal recognition on the diploma or be included in a graduation portfolio.

Dr. Darling-Hammond presented her policy recommendations to the SBE as an informational item at the May 2015 meeting. The full report is published on the Stanford University Web site, at <https://edpolicy.stanford.edu/sites/default/files/publications/recognizing-college-and-career-readiness-california-school-accountability-system_1.pdf>.

Based on Dr. Darling-Hammond’s recommendations, and at the request the SBE members to strengthen career measures in the CCI, the CDE is now collecting data on career-centered coursework completion, work-based learning experiences, and biliteracy, which will be considered for inclusion in the California School Dashboard (Dashboard) for the CCI.

### **Industry Engagement**

In 2017, the CCI Work Group was established to advise the CDE on the development of additional career measures to counterweigh the overemphasis of college measures in the indicator. The CCI Work Group is composed of both practitioners and researchers from across the state, including:

* Bonnie Munguia, Brawley Union High School District
* Brian Rowse, Santa Barbara Unified School District
* Gina Boster, Corona-Norca Unified School District
* Kathy Ruble, Manteca Unified School District
* Chun-Wu Li, Riverside County Office of Education
* Jeff Hittenberg, Orange County Office of Education
* Susan Steward, Butte County Office of Education
* Mike Patterson, California Teachers Association
* Matt Roberts, California Community Colleges Chancellor’s Office
* Michal Kurlaender, UC Davis
* Wendell Callahan, UC San Diego
* Soung Bae, Stanford University
* Eric Crane, WestEd
* Jason Willis, WestEd
* Diane Grotjohn, Coalition of Alternative Education Accountability
* Dustin Sperling, Central Region Agriculture Education Pathways Grant
* Jeremy Smith, State Building and Construction Trades Council of California
* Rebecca Bettencourt, E. & J. Gallo Winery
* Stephanie Houston, Colton-Redlands-Yucaipa Regional Occupational Program

Based on their collective work, three new career measures—Articulated CTE Courses, State Seal of Bilteracy, and Golden State Seal Merit Diploma—have been proposed for inclusion in the 2018 Dashboard. Data on these measures are currently being collected in the CDE’s California Longitudinal Pupil Achievement Data System, and simulations comparing these measures against Smarter Balanced Summative Assessment test scores are being prepared for the TDG and CCI Work Group. Based on the groups’ feedback, the CDE will propose criteria for these measures at the July 2018 SBE meeting.

In 2017, the CDE and the John W. Gardner Center for Youth and Their Communities at Stanford University, under the leadership of Dr. Jorge Ruiz de Velasco, established the California Advisory Task Force on Alternative Schools. The Task Force has broad and geographically diverse representation and is comprised of 22 members. To facilitate the work of the Task Force, three subcommittees were formed: 1) Modified Academic Indicators, 2) Local Indicators of Student Progress, and 3) Emerging Best Practices. The charge of the Modified Academic Indicators Subcommittee is to develop modified measures for alternative schools. This Subcommittee consist of the following members:

* Alysse Castro, San Francisco Unified School District
* Milisav Illic, Corona-Norco Unified School District
* Robert Eiseman, Los Angeles Unified School District
* Roger Rice, Ventura County Office of Education
* Diana Walsh-Reuss, Riverside County Office of Education
* Joel Leagans, Santa Clara County Juvenile Court Schools
* Heather DiFede, East County Special Education Local Plan Area
* Mike Ervin, Home Tech Charter School
* Ernie Silva, SIATech Schools
* Diane Grotjohn, APlus
* Machele Kilgore, California Consortium of Independent Study,
* Jorge Ruiz de Velasco, John W. Gardner Center for Youth and Their Communities, Stanford University

A full description of the career measures under consideration, along with proposed criteria for these measures, were presented to the SBE in a February 2018 Information Memorandum (<https://www.cde.ca.gov/be/pn/im/documents/memo-pptb-amard-feb18item02.docx>).

**Collaboration with Stakeholders**

Throughout the development of the CCI model, the CDE has created a continuous feedback loop, conferring with a broad, diverse, and geographically representative group of stakeholders. In addition to conducting statewide Webinars and regional meetings across the state, it reports regularly to the following groups:

* CPAG
* ACSE
* Regional Assessment Network
* LCFF Stakeholder Group

During its meetings with these stakeholder groups, the CDE shares any new CCI measures under consideration and actively seeks their feedback and recommendations, which are incorporated into the final set of recommendations brought to the SBE.

1. In his final report, Dr. Conley wrote that metacognitive assessment and performance assessment cannot currently match the type of institutional stability that other assessments (e.g., as produced by the ACT, College Board, and IB) offer, but that they hold great promise. The CDE did not include these measures in its initial recommendations but is investigating ways to incorporate them into the CCI in the future. [↑](#footnote-ref-1)
2. The sample includes grade eleven students statewide who took both the Smarter Balanced Summative Assessments and SAT and who subsequently enrolled as first time freshmen (in 2016–17) at one of the 23 campuses of the CSU system. (A smaller analytic sample included those who enrolled at the UC Davis.) [↑](#footnote-ref-2)
3. Presented in September 2013 and posted at <https://education.ucdavis.edu/sites/main/files/file-attachments/kurlaenderjacksonpsaa9-6-13_presentation-distribute.pdf>. [↑](#footnote-ref-3)
4. Dr. Kurlaender’s early analyses were based on data from the Early Assessment Program (EAP), which were, in turn, based on results from the enhanced Standardized Testing and Reporting (STAR) Program. The Smarter Balanced Summative Assessments have since replaced the EAP and STAR. [↑](#footnote-ref-4)
5. The sample includes grade eleven students statewide who took both the Smarter Balanced Summative Assessments and SAT and who subsequently enrolled as first time freshmen (in 2016–17) at one of the 23 campuses of the CSU system. (A smaller analytic sample included those who enrolled at the UC Davis.) [↑](#footnote-ref-5)