



GUIDANCE ON DIAGNOSTIC AND FORMATIVE ASSESSMENTS

BACKGROUND

Due to the school closures resulting from the 2019 novel coronavirus disease (COVID-19) pandemic, state and federal testing requirements for summative assessments for English language arts/literacy, (ELA), mathematics, science, and English language proficiency were waived. Deep concerns about learning loss have triggered an urgency that district and school staff have in place useful diagnostic assessments that can identify where students are in their learning within key content areas when they return to school so teachers can teach them most effectively.

As we think about the need for diagnostic assessments to help teachers address the variability that students are likely to exhibit after very different learning experiences this spring, it is important to remember that each assessment is designed with a specific purpose. Researchers (Earl and Katz 2006) identify three primary purposes of assessments: assessment *for* learning, assessment *as* learning, and assessment *of* learning. Identifying the purpose of an assessment is important for ensuring its appropriate use. Experts note that formative assessments are *for* learning, while summative assessments are *of* learning. When assessments are performance-based—that is, when they ask students to show what they know and can do by actually *doing* certain tasks (e.g., writing an essay or designing an experiment)—they support the learning process. These are examples of assessments *as* learning, and they highlight the importance of the self-assessing and self-monitoring processes students use during learning, which have a high potential to engage students in fostering their own ongoing learning.

To measure learning progress over time, it is important that assessments be scaled across a multiyear continuum of learning that can evaluate how students are progressing in particular areas (e.g., word recognition and decoding, reading comprehension, understanding of ratio and proportion).

Summative assessments typically sample a wide range of information to produce an overall score that evaluates what has been learned, but they do not provide sufficiently detailed information to guide personalized teaching and learning. Furthermore, statewide summative assessments used for federal accountability purposes focus primarily on grade-level standards, which means they do not test skills above or below grade level; hence, they cannot accurately show where a student's understanding of a specific skill or concept is nor what the teacher should focus on to ensure successful student learning.

Diagnostic assessments are intended to help teachers identify what students know and can do in different domains to support their students' learning. These kinds of assessments may help teachers determine what students understand in order to build on the students' strengths and address their specific needs. Diagnostic and formative tools can guide curriculum planning and teaching in more specific ways than most summative assessments.



In addition to diagnostic assessments, teachers and students can use the formative assessment process to monitor and adjust learning together. Formative assessment practices provide feedback both to the teacher and the learner; the feedback is then used to adjust ongoing teaching and learning strategies to improve students' attainment of curricular learning targets or goals. The formative assessment process has four attributes:

- Clarify: determine what students will learn and how they will know they have learned it.
- Elicit: generate evidence of student learning, such as asking questions.
- Interpret: review evidence to determine students' progress towards the learning goal(s).
- Act: take instructional next steps to move students from where they are to where they need to be, such as reteaching using a different mode. (Smarter Balanced Assessment Consortium 2009).

Examples of teachers in action, focusing on the four attributes, can be viewed in the Smarter Balanced video "[Formative Assessment Practices to Support Student Learning.](#)"

Researchers have found that very large learning gains can occur when teachers: first, provide students with rich tasks that are well-supported; then, offer thoughtful feedback (comments, not grades) about what has been accomplished and what can be done next; and then, provide opportunities for immediate practice and revision using the feedback. These formative assessment opportunities focus both students and teachers on how to improve (Black and Wiliam 2010).

Resources for formative assessment are provided in each of California's curriculum frameworks, along with examples to assist teachers, coaches, site- and district-administrators, and counselors—for all subjects, including ELA, mathematics, and science. Teachers can use tools such as rubrics to clarify expectations and to provide feedback; journals, quick writes, and discussions to see what students are thinking; pre-tests and exit tickets to see where they are at the beginning and end of class; strategic questioning and performance tasks during the lesson; observations of students working in small groups; student work samples; and a variety of others.

Many of the diagnostic tools described later in this guidance offer lessons in which formative tools are embedded, accompanied by instructional guidance on how teachers might respond to various conceptions or misconceptions students appear to hold.

In evaluating their students' knowledge and performance, teachers should use multiple measures (Brookhart 2009) from district, school, and classroom assessments; narrative report cards; essays; class projects; and so forth. Multiple measures from various data sources should be used to determine where students are in their learning and identify areas in which they may need additional support.

In a return to school as complex as that anticipated this fall, teachers likely will want to use a variety of informal tools to assess student learning and performance—as well as their social-emotional well-being and home situation—in the first week or two of school and plan for a more formal diagnostic assessment after students have grown comfortable in the learning community and have gotten used to being “back at school.”



GUIDANCE FOR USING STATE RESOURCES

This guidance describes how local educational agencies (LEAs) can use California’s approved assessments to evaluate where students are academically at the start of and throughout the school year. At the state level, the California Assessment of Student Performance and Progress (CAASPP) and the English Language Proficiency Assessments for California (ELPAC) provide summative assessments for ELA, mathematics, science, and English language proficiency to meet state and federal requirements. The assessment programs also provide resources for teachers that are aligned with California standards to help teachers implement the formative assessment process during instruction and when sharing information with other educators, students, and parents. These assessment tools include the Smarter Balanced assessment system, developed by the Smarter Balanced Assessment Consortium, which is freely available to all public school districts, schools, and teachers in California.

The guidance also includes a number of additional tools approved for diagnostic assessment in grade two—all of which measure the state standards and have the capacity to assess student progress across a longer continuum of performance, typically covering the ELA and mathematics domains in K–8 or K–12.

Smarter Balanced Assessment System

In California, the Smarter Balanced assessment system provides assessments *for*, *as*, and *of* learning in an integrated manner. The system has three components:

- Summative assessments, measuring grade-level standards for accountability purposes
- Interim assessments, designed to support teaching and learning throughout the school year
- Tools for Teachers, a website designed to support classroom-based formative assessment practices

All of these are designed to measure the Common Core State Standards and all include performance tasks as well as selected-response and open-ended response items.

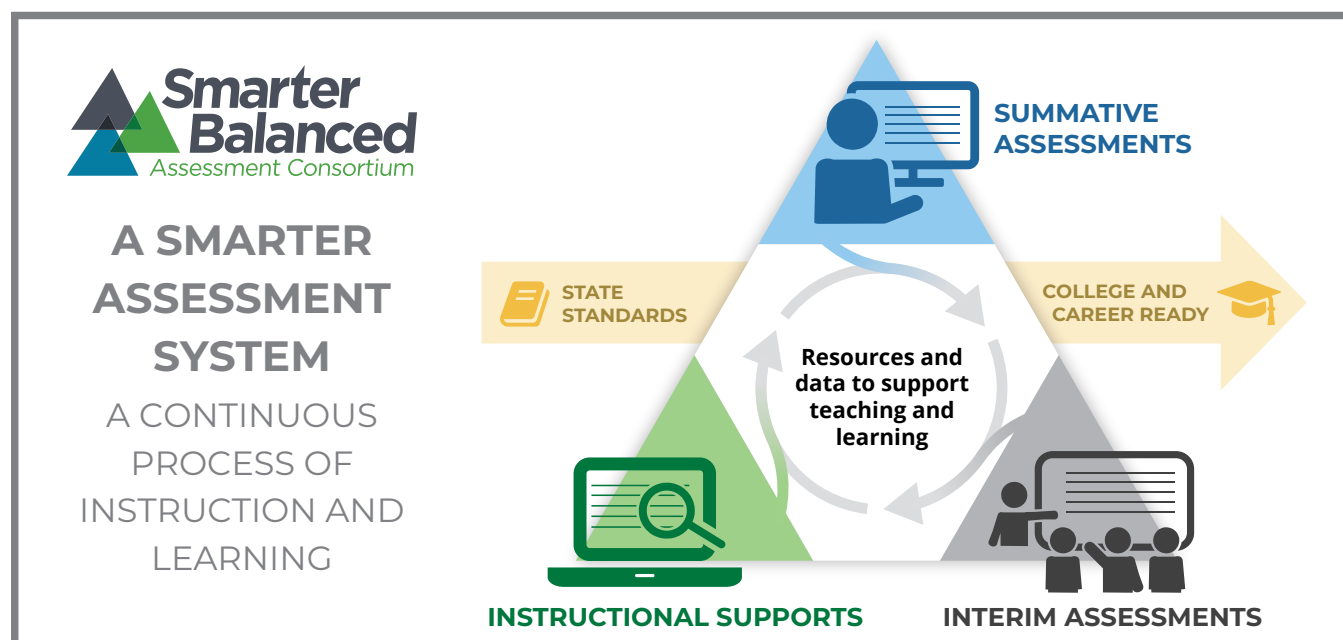


FIGURE 1. Continuous Process of Instruction and Learning



Interim assessments and formative assessment tools are available throughout the year to all K–12 teachers in all LEAs, including charter schools. Educators at nonpublic schools who provide direct instruction to California public school students also are eligible to use these assessments.

The Smarter Balanced Interim Assessments are fixed-form (nonadaptive) tests designed to provide meaningful information for gauging student progress toward mastery of the skills measured by the summative assessments, but they also can be used to delve more deeply into particular domains and can be used at any point along the learning continuum. The interim assessments were developed for students in grades three through eight and high school, but may be administered to students at any grade level.

Although California *Education Code (EC)* Section 60642.7(b) does not allow the results from the interim assessments to be used for any high-stakes purpose, LEAs may want to use the *Interim Comprehensive Assessments* for an overview of students' status on grade-level standards for their grade level during 2019–2020, and then follow up with groups of students in more specific domains that appear to need more reinforcement using the *Interim Assessment Blocks*, which provide more detailed information to guide teaching in particular areas (e.g., multiplying and dividing within 100). The interim assessments are described below:

- Interim Comprehensive Assessment (ICAs) are built on the same blueprints as the summative assessments. The ICAs, typically 35 to 45 items in length, include the same item types and formats, including performance tasks, as the summative assessments, and yield results on the same vertical scales. The ICAs yield overall scale scores, overall performance level designations, and claim-level information.

[Interim Comprehensive Assessment Blueprint for ELA](#)

[Interim Comprehensive Assessment Blueprint for Mathematics](#)

- Interim Assessment Blocks (IABs) focus on smaller sets of targets and, therefore, provide more detailed information for instructional purposes. Beginning with the 2019–2020 school year, a new type of IAB—called the focused IAB—became available. Focused IABs measure smaller bundles of content to give teachers a better understanding of students' knowledge and academic performance in specific areas and provide teachers with precise next steps for instruction. Teachers can assemble several focused IABs together to evaluate student learning in areas of concern.

[Interim Assessment Blocks Blueprint for ELA](#)

[Interim Assessment Blocks Blueprint for Mathematics](#)

[Focused Interim Assessment Blocks Blueprint for ELA](#)

[Focused Interim Assessment Blocks Blueprint for Mathematics](#)

- More than 160 interim assessments are scheduled to be available August 20, 2020. Results from these assessments will be available electronically to educators within 20 minutes of administration once any necessary hand scoring has been completed. A school or district coordinator will need to create the student groups that allow teachers to access these results in the California Educator Reporting System.



INTERIM ASSESSMENTS AT A GLANCE

Interim Comprehensive Assessments

Assess the same targets as the summative.

Examples:

- Grade 3 ELA
- Grade 3 Math

**Current Interim Assessment Blocks**

Assess 1–8 targets in math and ELA/literacy.

Examples:

- Grade 3 ELA, Reading Literary Texts
- Grade 3 Math, Operations and Algebraic Thinking

**Focused Interim Assessment Blocks**

Assess 1–3 targets in math and ELA/literacy.

Examples:

- Grade 3 ELA, Reading Literary Texts: Text Analysis
- Grade 3 Math: Multiply and Divide Within 100



FIGURE 2. ICAs, IABs, and Focused IABs

- **Tools for Teachers** includes lessons and activities with interactive Connections Playlists that can be used with interim assessments, high-quality resources aligned with learning standards, formative assessment strategies embedded in each resource, and accessibility strategies. Teachers also can use formative assessment tools and teaching supports from Tools for Teachers. These instructional resources—including lessons and activities, recommended materials, and in-process assessments that can guide teaching strategies—are linked to the same standards as those for the interim and summative assessments.

Related Resources

- [Interim Assessment Video Series](#). This series consists of five video modules developed to help educators effectively use the interim assessment systems and tools that are needed to select, administer, hand score, and view and use results from the Smarter Balanced Interim Assessments.
- [Interim Assessments by Grade](#). This document provides a list of all interim assessments available by grade, including the claims and targets, total number of items, and number of items that are hand scored. This information is provided to assist LEAs in planning for the administration and local hand scoring of the interim assessments.
- [Interim Assessments Overview](#). This document describes the interim assessments, including their purpose, use, and varieties. For each grade and subject, this document provides a list of interim assessments available.
- [Smarter Content Explorer](#). This user-friendly web tool combines the information provided in the Smarter Balanced Content and Item Specifications—key resources used in test and item development—into an easy-to-use search interface. This tool can help teachers better understand how test questions are designed to provide evidence of what students know and can do.
- [Tools for Teachers](#). This website includes standards-based lessons, activities, materials, and formative assessments for each domain of the Common Core State Standards.
- [Smarter Balanced Remote Teaching and Learning](#). This new website provides suggestions for how teachers can use Smarter Balanced assessment resources when engaged in remote instruction.

Practice and Training Tests

Furthermore, teachers and students can use the CAASPP and the ELPAC practice and training tests in formative ways during instruction. These tests provide them with the opportunity to become familiar with



the testing software before interim or summative assessments are administered. They also allow students to access and respond to the different types of questions they will encounter on the tests. Practice and training tests are available for the following:

- Smarter Balanced ELA
- Smarter Balanced Mathematics
- California Science Test
- California Alternate Assessment (CAA) for ELA
- CAA for Mathematics
- CAA for Science
- California Spanish Assessment
- ELPAC

For practice or training resources, visit the [CAASPP Online Practice and Training Tests Portal](#) or the [ELPAC Practice and Training Tests web page](#). Guides for the administration of the CAASPP and ELPAC practice and training tests are available on the Department of Education (CDE) [Quick Reference Guides web page](#).

Other Diagnostic Tools

The CDE has approved a set of assessments for diagnostic testing in ELA and mathematics that meet the requirements of *EC* Section 60644. These assessments have been identified as aligned with the Common Core State Standards and can be used for tracking learning progress and for guiding instruction mapped to student needs. They are listed and described on the CDE website (refer to the [Grade Two Diagnostic Assessments web page](#)) as well as in table 1, below. (We note that other publishers have inquired about adding their resources to this list; however, funding is no longer available for vetting additional grade two diagnostic assessments.) LEAs can certify to the CDE the number of students in grade two who are administered these assessments pursuant to *EC* Section 60644 for the purpose of determining apportionment funding as set by the California State Board of Education annually.

These assessments were initially evaluated for grade two diagnostic testing, but all are scaled assessments that show how students are progressing along a continuum that extends across grade levels and can be used over multiple school years to inform instruction. LEAs that already use one of these assessments can examine student progress over time from prior years to the present and into the coming year(s).



TABLE 1. CDE-APPROVED DIAGNOSTIC ASSESSMENTS

Assessment	Notes
Acuity Common Core* K–12 ELA Math In English	Can be used multiple times per year. Assessments, which include performance tasks, can be used as designed, or can be modified by teachers to address specific standards. Assessments are accompanied by instructional resources, which are recommended for each student in a personalized playlist that includes interactive projects and exercises, based on how students perform. Teachers can also create performance tasks using the task and rubric creation tool.
Developmental Reading Assessment K–8 ELA Reading and Writing / In English and Spanish	Typically used several times each year. Individually administered assessment that allows teachers to determine each student’s independent and instructional reading level by evaluating reading engagement, oral reading fluency, and comprehension. The diagnostic DRA Word Analysis assessment provides additional information on how struggling and emerging readers attend to and work with various components of spoken and written words. The resulting plan documents what each student needs to learn next and enables teachers to differentiate instruction and select books at the appropriate level.
Easy CBM K–6 (reading) K–8 (math) In English and Spanish	Typically used several times a year. Assessments are designed for CCSS math and reading standards. Math, vocabulary and reading comprehension assessments are administered online; other measures (letter names, letter sounds, phoneme segmentation, word and passage reading fluency) are administered individually.
iReady K–12 ELA Math In English	A suite of computer-based assessments is designed to provide a complete picture of student performance and growth across math and ELA. The suite includes diagnostic and standards mastery assessments, dyslexia screening, and oral reading fluency assessments that can be used coherently to monitor and support student progress. Reports include information about how to interpret both overall scores and growth as well as performance on individual items, highlighting what each student needs to learn next. Results from the are connected to personalized learning pathways and accompanying teacher resources.



TABLE 1. CDE-APPROVED DIAGNOSTIC ASSESSMENTS *continued*

Assessment	Notes
<p>Measures of Academic Progress</p> <p>K–12 ELA Math</p> <p>In English and Spanish</p>	<p>A suite of computer-based assessments in math, ELA, and science includes:</p> <ul style="list-style-type: none"> ▪ Growth: an interim assessment designed to be administered up to 3 times per year to provide benchmarking and growth information. ▪ Reading Fluency: an assessment of oral reading fluency, foundational skills, and reading comprehension for grades K-3. ▪ Skills: designed to be used as often as needed to provide progress-monitoring information in between administrations of MAP growth. <p>MAP assessments are designed to provide specific information about what knowledge and skills students are ready to learn next and are connected to instructional resources. They are also connected to student profiles that provide both growth information and comparisons to other assessments that may be of interest, like Smarter Balanced assessments.</p>
<p>mCLASS: Reading 3D / mCLASS Math</p> <p>K–6 ELA K–3 Math</p> <p>In English and Spanish</p>	<p>mCLASS reading 3D assessments are a suite of screening and progress monitoring measures that focus on comprehension and meaning-making. These assessments are individually administered using leveled readers from a book set and completing a series of performance tasks that may include responding to oral comprehension questions, completing a retell, and/or writing responses to comprehension questions. Student scores are connected to developmental progressions and research-based benchmarks. mCLASS math assessments combine screening and progress-monitoring with guided diagnostic interviews to uncover mathematical reasoning and skills. Assessments can be administered one-to-one or through written benchmark assessments, and the results of both assessments and diagnostic reviews are reported as diagnostic profiles with suggested instructional activities.</p>
<p>Performance Series</p> <p>K–12 Reading 2–8 ELA K–12 Math /</p> <p>In English and Spanish (for math grades 2–9)</p>	<p>Computer adaptive diagnostic testing. Questions are multiple-choice, and student reports include ranking relative to national percentiles, grade-level estimates, and placement of student performance into performance bands. Teachers can connect student performance to customized learning plans that are related to CCSS learning goals.</p>

**TABLE 1. CDE-APPROVED DIAGNOSTIC ASSESSMENTS** *continued*

Assessment	Notes
Riverside Interim Assessments 2–11 ELA Math	Interim assessments can be administered as pre- and post-tests to monitor learning before and after instruction. All items are selected response, either stand-alone (math and language) or paired with passages (reading). Student performance is reported through proficiency scores.
Star Assessments K–3, Star Early Learning bundle (includes Star Early Literacy and Star Reading) pre-K–3, Star Early Literacy K–12, Star Reading 1–12, Star Math In English and Spanish	<p>Star Early Learning is a bundle of Star Early Literacy and Star Reading. Together, these literacy assessments measure both literacy and numeracy in a single assessment, providing information about phonological awareness, phonics, word recognition, fluency (including estimated oral fluency), vocabulary, and comprehension.</p> <p>Star Early Literacy tests a child’s understanding of word knowledge and skills, comprehension, meaning, and numbers and operations. It is normed for grades pre-K–3.</p> <p>Star Reading measures a student’s understanding of vocabulary, ability to comprehend texts, and ability to analyze, understand, and evaluate literary and informational texts. It is normed for kindergarten–grade 12.</p> <p>Star Math assesses a student’s grasp of concepts including numbers and operations, algebraic thinking, geometry, measurement, data analysis, statistics, and probability. Star Math is normed for grades 1–12.</p>

*In addition to the resources listed above, many California districts participate in the [Mathematics Assessment Project](#) (MAP), which offers an extensive sequence of formative assessment lessons and rich summative performance tasks to support the Common Core State Standards. Sponsored by the [Mathematics Assessment Resource Service \(MARS\)](#) at the University of California at Berkeley, MAP works with states and networks of districts, including the Silicon Valley Mathematics Initiative, on the design and implementation of performance assessments and on professional development for designers and teachers. Many of the tasks designed by MARS as part of its *Balanced Assessment in Mathematics* (BAM) have been incorporated into the Acuity materials described above.



REFERENCES

- Black, P., and D. Wiliam. 2010. "Inside the Black Box: Raising Standards Through Classroom Assessment." *Phi Delta Kappan* 92 (1): 81–90. DOI: 10.1177/003172171009200119.
- Brookhart, S. M. 2009. "The Many Meanings of 'Multiple Measures.'" *Educational Leadership*, 67 (3): 6–12. Retrieved from <http://www.ascd.org/publications/educational-leadership/nov09/vol67/num03/The-Many-Meanings-of-%C2%A3Multiple-Measures%C2%A3.aspx>
- Earl, L., and S. Katz. 2006. "Rethinking Classroom Assessment with Purpose in Mind." *Winnipeg, Manitoba: Western Northern Canadian Protocol*. https://www.edu.gov.mb.ca/k12/assess/wncp/full_doc.pdf (accessed June 15, 2020).
- Smarter Balanced Assessment Consortium. 2009. *Understanding the Formative Assessment Process*. <https://portal.smarterbalanced.org/library/en/formative-assessment-process.pdf> (accessed June 22, 2020).