

Defining High-Quality Instructional Materials for Mathematics to Meet the Needs of English Learners

The Governance Team Perspective

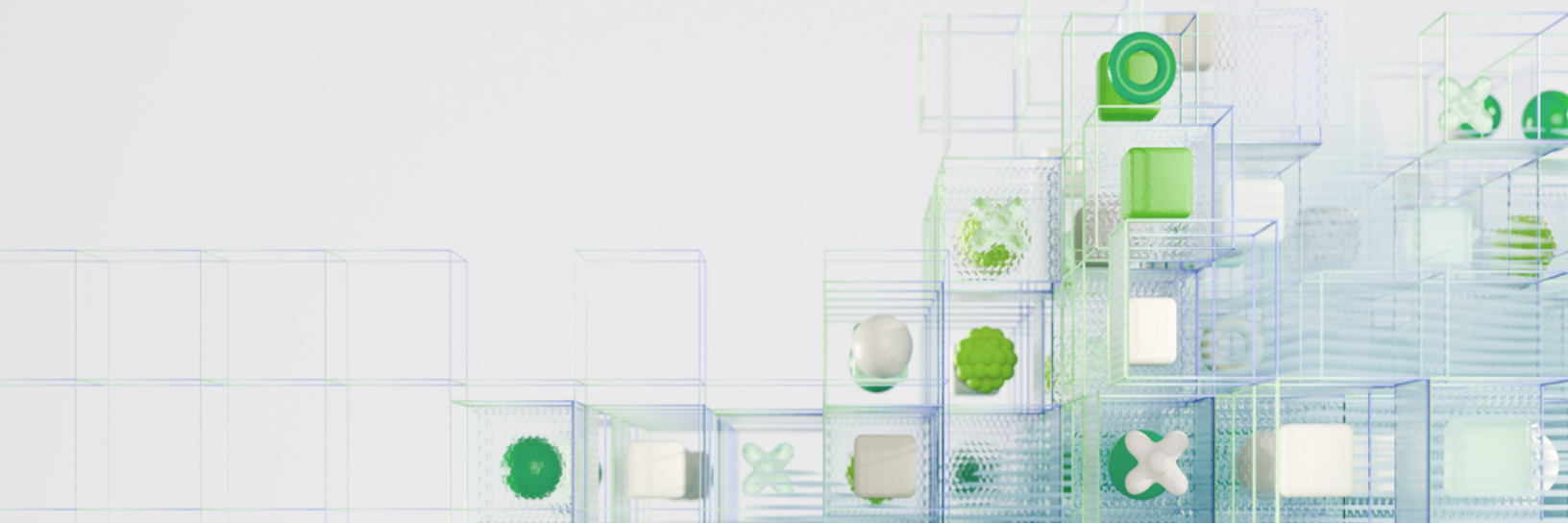


English learners (ELs) deserve access to a well-rounded education that helps them gain proficiency in English and all academic content areas, including mathematics. To make this possible, governance teams should focus on creating the conditions for all students to have access to advanced coursework in the content areas, along with the support to help them succeed in those courses. Adopting and implementing high-quality instructional materials (HQIMs) are powerful ways to foster those conditions at the local level. As a governance team, key actions can help local adoption and implementation of instructional materials that meet the needs of all students, including ELs.

California is at a critical juncture, and the state must improve outcomes for its students, including in math, where just over one in three students (36 percent) were “prepared to meet” or “exceed” math standards, according to the 2023–24 California Assessment of Student Performance and Progress (CAASPP) results. This is significantly lower for ELs, of whom just 10 percent scored as “prepared to meet” or “exceed” math standards, and comparable to reclassified fluent-English proficient students, of whom 39 percent were prepared. The fact that these outcomes are below pre-pandemic levels and signal little progress over the past decade is an urgent call to action.¹

California now has an opportunity to shift these trends. In July 2023, the State Board of Education (SBE) adopted California’s new [Mathematics Framework for California Public Schools: Kindergarten Through Grade Twelve](#) (Mathematics Framework). The Mathematics Framework provides guidance and resources for local educational agencies (LEAs) and their governance teams on how to support improved math instruction, including by securing the supports that enable all students to learn and establishing a robust review and adoption process of math instructional materials.²

This brief is meant to guide governance teams as they seek to define, adopt, and implement high-quality math instructional materials that are aligned to the Mathematics Framework and meet the needs of ELs. The following sections will review each of the components that make up one definition of HQIM, developed by the High Quality Instructional Materials Learning Partners Coalition (HQIM-LPC) and offer recommended actions and questions for governance teams to consider when making the vision of improved math instruction and outcomes for ELs and all students a reality for their LEAs.



What does the term “high-quality instructional materials” mean?

The new Mathematics Framework was officially adopted in 2023, and LEAs are required to adopt math instructional materials to align with the framework. Trustees may have heard the term “high-quality instructional materials” (HQIM) being used when describing how LEAs should select which options can best meet the needs of their students. But what does HQIM actually mean?

The HQIM-LPC* developed a definition of HQIMs that is explained in the November 2023 publication, *Defining High-Quality Instructional Materials for Mathematics: Centering the Assets and Needs of Multilingual Learner and English Learner Students*. This publication includes five research-aligned components that encompass HQIMs, paraphrased below, that can meet the needs of ELs:

- ▶ Alignment to grade-level standards;
- ▶ Supports for all students to access grade-level content;
- ▶ Guidance to facilitate implementation;
- ▶ Teaching practices that embrace student cultures and languages; and
- ▶ Assessment of both content and language.³

While the HQIM-LPC definition was drafted for a broader audience, it can inform governance teams as they seek to create their local expectations for defining HQIM and establishing their adoption process.



* The HQIM-LPC was formed in 2021 as an effort to build the capacity and knowledge of education, policy, and advocacy organizations around the selection of high-quality instructional materials as a lever for equity and improved EL outcomes. It is composed of Californians Together, The Education Trust-West, English Learners Success Forum, Loyola Marymount University Center for Equity for English Learners, the Partnership for Los Angeles Schools, the San Joaquin County Office of Education, and UnboundEd. Learn more here: bit.ly/HQIM-resources

COMPONENT ONE

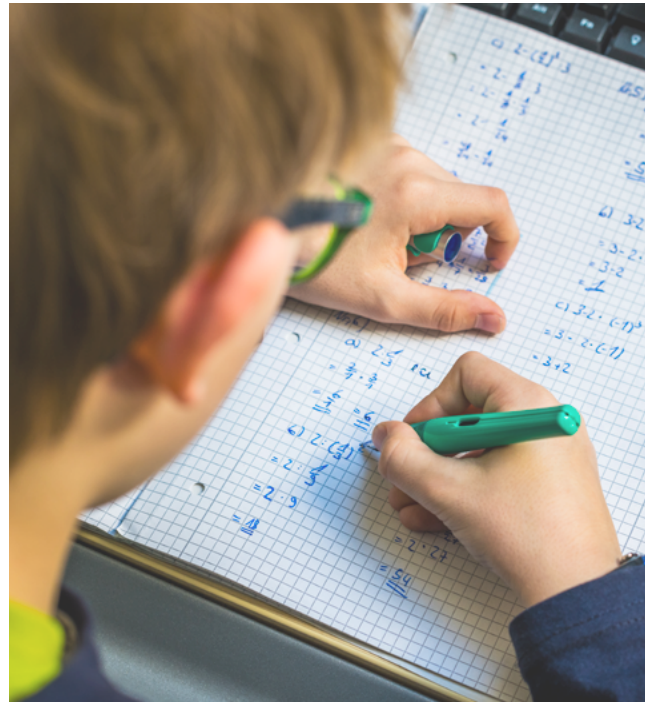
Alignment to grade-level standards

Ensuring that instructional materials align with grade-level standards is a must for LEAs seeking to adopt materials for any subject area. As it relates to math, this means that any LEA-adopted instructional material must align with the California Common Core State Standards for Mathematics (CA Math Standards) and Standards for Mathematical Practice (SMPs), which were adopted by the SBE in August 2010 and modified in January 2013. This requirement needs to be met for any material to be considered for adoption (see [Chapter 13 of the Mathematics Framework](#)).⁴

Recognizing the important role that language has in math content, alignment to grade-level standards must also include alignment to the California English Language Development Standards (CA ELD Standards), which support access to grade-level content for ELs.⁵ By ensuring the alignment of math instructional materials to both the CA Math Standards and CA ELD Standards, LEA leaders can be more confident that their adopted materials meet the needs of their students, including ELs.

What this means for governance teams

Board members can ensure that their LEA's review process for math instructional materials checks for alignment to both the CA Math Standards and the CA ELD Standards. This might include adopting rubrics that check for this alignment as well as including staff with strong math and ELD expertise throughout the review process.



Governance team questions

- ▶ How will our board's local review process verify alignment with the CA ELD standards?
- ▶ How are staff with expertise in the CA ELD standards contributing to the review process?

COMPONENT TWO

Supports for all students to access grade-level content

All governance teams should strive to provide access to effective and advanced math instruction for all students. Math instructional materials can help meet this goal if they include strong student supports. These student supports can take the form of strategies for educators to tailor instruction to the individual needs of students, otherwise known as differentiation of instruction. Differentiation is meant to allow all students to fully access grade-level content and is not meant to simplify the content.

Some student supports for ELs that instructional materials might include are:

- ▶ Strategies for educators to employ integrated ELD practices within math instruction;
- ▶ Strategies to enable students to participate, learn, and share knowledge through various methods of expression, including through speaking, listening, reading, and writing activities;
- ▶ Guidance and support for educators to anticipate and teach the vocabulary that students need to access complex math content, including mathematical terms and definitions; and
- ▶ Resources and availability of materials in the multiple languages of students. Within dual language immersion settings, primary instructional materials must be in both English and the additional language of instruction.

Effective supports also provide students with multiple opportunities to build proficiency over time. For students below grade-level standards, this means providing them with opportunities and strategies to catch up. Meanwhile, for students who are on track, this could mean opportunities to expand upon concepts through enrichment.

What this means for governance teams

Board members can ensure their LEA's review process for math instructional materials checks for the inclusion of effective student supports. This might mean ensuring that materials include guidance for educators and ideas for



differentiation within sample lesson plans. Governance teams should also specify the student groups it wants to ensure are supported effectively in math instruction, including ELs, and ensure that a rubric is in place to check for strengths at meeting the needs for each student group. Lastly, as LEAs pilot materials (the process where an LEA tests new instructional materials in a limited number of classrooms before making the final selection), governance teams can ensure that this is done in classrooms where the majority of the identified student groups are being served.

Governance team questions

- ▶ How will our LEA plan to check for effective EL student supports during the review process for math instructional materials?
- ▶ What is the plan for piloting math instructional materials before the final adoption recommendation comes to the board?
- ▶ Does this plan prioritize piloting in classrooms serving the highest-need students, including ELs?

COMPONENT THREE

Guidance to facilitate implementation

HQIMs should include guidance for staff at different levels of the system that points them toward areas of focus and allows them to effectively plan for implementation. This includes teachers, paraeducators, school administrators, and LEA leaders.

Guidance should clarify how teachers will prioritize the shifts in math instruction required to implement the materials. This includes lesson plans and accessible accompanying resources to support effective planning, as well as differentiation for targeted student groups and intervention efforts (see [Component Two: Supports for all students to access grade-level content](#)), and guidance on assessing students' strengths and weaknesses during and after instruction (also known as formative assessment, see [Component Five: High-quality assessment of both content and language](#)).

For school and LEA leaders, HQIMs incorporate guidance on how to implement the materials and train staff across the LEA and within each school site. This can include clear pacing guides (suggestions about how much time to spend on specific content) with guidance for areas of focus and major expectations within each grade.

It is important to note that in reviewing math instructional materials, discussing a plan for educator professional learning is critical. An LEA can adopt the best math instructional materials, but these will not have the desired impact on student outcomes if educators are not supported and trained to implement them effectively. Instructional materials can help by including guidance on the types of professional learning opportunities appropriate for staff at all levels of the system and ideas for collaboration between math teachers and other educators, including ELD teachers, instructional coaches, and paraeducators.

What this means for governance teams

Board members can ensure that their LEA's review process for math instructional materials checks for guidance on implementation for both educators and school and LEA leaders. This implementation guidance can include pacing guides, recommended professional learning, and modifications to ensure that all students have access.

Additionally, the governance team should discuss, approve, and invest in an implementation plan. The board can support educators and district leaders in implementing a new curriculum with professional learning. This professional learning and implementation plan should include opportunities for collaboration among various types of educators, including math teachers, ELD teachers, instructional coaches, and paraeducators. For information about considerations for approving professional learning for math instruction, see CSBA's 2025 brief "[High-Quality Professional Development to Support Instructional Materials Adoption Aligned with the New Math Framework](#)." The brief outlines evidence-based principles for effective professional development that can improve teaching practices.

Governance team questions

- ▶ Does our local review process check for implementation guidance for educators and school and LEA leaders?
- ▶ Do we have a professional learning plan for math teachers that would allow them to effectively implement the new instructional materials?
- ▶ Does the plan include opportunities for collaboration among math teachers, ELD teachers, instructional coaches, and paraeducators?
- ▶ Does the plan include a focus on both the delivery of math content and integrated ELD strategies embedded within the instructional materials?

COMPONENT FOUR

Teaching practices that embrace student cultures and languages

Effective teaching practices should ensure that instruction is relevant and connects to the rich experiences of all students. The term “culturally and linguistically sustaining pedagogy” refers to a teaching approach that actively supports and affirms students’ cultural and linguistic identities, incorporating their languages and experiences into the classroom. This pedagogy creates a learning environment where students feel valued and empowered. It also allows students to contribute to the overall experience and take ownership of the learning for themselves and their peers.⁶

Therefore, math instructional materials should be responsive to students’ cultures, languages, and experiences. This way of teaching can increase relevance for students, further engage them, and allow for their prior knowledge and other strengths to be brought into the classroom. This component overlaps with [Component Two: Supports for all students to access grade-level content](#) in that effective student supports must also respond to the specific learning needs and assets of students.

Engaging families and their experiences can be a powerful way to improve both their connection to school and student engagement. Math instructional materials can provide guidance for students to apply math concepts to situations that they might experience in their families or communities. This guidance can also include recommendations about how families can support their students in exploring some of the concepts.

What this means for governance teams

Board members can ensure that their LEA’s review process for math instructional materials checks for examples and guidance for educators. This guidance can help educators activate the prior knowledge and experience of students. Moreover, the review process should ensure that the application of math concepts includes situations and representation of math leaders and applications that are relevant to the experiences of students and represent their rich cultural diversity.



Governance team questions

- ▶ Does our LEA review process check for guidance on how to build upon the prior knowledge of students, apply concepts to their everyday lives, and encourage families to support math learning?
- ▶ Are the examples of both the application of math concepts and representation of math leaders throughout the materials representative of the rich cultural diversity of our state and community?

COMPONENT FIVE

Assessment of both content and language

Assessments are a critical component to any instructional material as they allow educators to know what students are learning. Assessments should inform decisions at the LEA, school, and classroom level based on what they show about what math concepts students have mastered, and which they might be struggling with. HQIMs incorporate a range of assessments that effectively measure a student's math content knowledge, as well as the knowledge of language that supports their ability to learn the math content.

Language is important to the understanding and application of mathematics. Therefore, it is important for assessments to measure a student's knowledge of the language necessary to understand core mathematics content. By measuring students' knowledge of mathematical language, educators can better understand how to effectively support a student in developing their math knowledge and in their ability to share what they know.

Math materials should incorporate three main types of assessments:

- ▶ **Formative assessments** are ongoing assessments that can be done within classroom instruction and allow educators to know in real time if students are understanding concepts and to intervene if needed. Formative assessments also have practical benefits for students as they allow them to reflect on their knowledge and challenges to build confidence in their ability to learn and grow.⁷
- ▶ **Interim assessments** might come in the form of a quiz at the end of a chapter or after concepts have been covered in a defined time period. There are a series of interim assessments connected to the CAASPP for math, which are available to LEAs and educators.⁸
- ▶ **Summative assessments** are final assessments of knowledge. A common example is the CAASPP for math, which is mainly used for accountability purposes (see [Mathematics Framework](#) Chapter 12: Mathematics assessment in the 21st century).

Lastly, all assessments must allow students to demonstrate knowledge in different forms, including writing, speaking, and project-based work. They must also include several supports that allow students to truly show what their knowledge is, including language supports that can include the ability for students to show their math knowledge in their home language.

What this means for governance teams

Board members can ensure that their LEA's review process for math instructional materials checks for guidance and tools that allow teachers to assess the math content and language necessary for students to understand the content. The review process should ensure that the three types of assessments (formative, interim, and summative) are included, as well as for these assessments to allow students to demonstrate knowledge in different forms and in their home languages.

Governance team questions

- ▶ Does our LEA review process check for the inclusion of formative, interim, and summative assessments that measure math content as well as the language necessary for students to understand the content?
- ▶ Do the materials offer guidance on how to assess students through various modalities (including through writing, speaking, and project-based work) and in their home language?

Recommendations for Governance Teams

As LEAs begin the process of evaluating, adopting, and implementing new math instructional materials aligned to the Mathematics Framework, there are key actions boards can take to ensure that the needs of students and ELs are met.

<div>1</div> <div><i>Develop an LEA definition of high-quality instructional materials</i></div>	<p>While the components in this brief and the definition established by the HQIM-LPC are robust, each governance team should use these as a resource and tool by which they can align their own vision and definition of what high-quality instructional materials mean at the local level. One of the ways that this can be done is by conducting board study sessions focused on exploring the components of HQIMs highlighted in this brief. By discussing each component with the governance team, LEAs will be able to develop a common understanding of what each of these means for their students and schools, address any questions or misunderstandings, and potentially add to the existing HQIM definition and components in order to meet the unique needs of students.</p>
<div>2</div> <div><i>Set expectations from the beginning</i></div>	<p>Ensure the instructional materials review process incorporates each of the local HQIM components. While board members are not the ones conducting the review of instructional materials, they are responsible for setting the goals and vision for their LEA's review process. In setting this vision, boards can ensure that their LEA is prepared to check for strengths of the instructional materials that it reviews in each of the HQIM components highlighted in this brief. A summary of a review for each component can also be requested as the board deliberates and makes a final decision on which materials it will adopt. However, it is important to ensure that checking for strengths in these components be part of the vision and goals for the review process from the beginning, not something that is asked for once the process is well underway.</p>
<div>3</div> <div><i>Have a plan for implementation that includes professional learning</i></div>	<p>Math instructional material adoptions are a significant investment with the potential to improve student outcomes. However, this investment will not pay off if LEAs do not provide schools and educators with the resources, time, and support to effectively implement and use the new materials. To set LEAs up for success, they should establish a plan for implementation that includes professional learning for staff at all levels of the system (including principals, educators, coaches, and paraeducators). To learn more about effective math professional development, see the CSBA brief "High-Quality Professional Development to Support Instructional Materials Adoption Aligned with the New Math Framework."</p>

4

Encourage collaboration between various LEA departments in planning, review, adoption, and implementation of math instructional materials

For an LEA's adoption and implementation of instructional materials to truly serve the needs of its highest-need students, including ELs, boards must draw upon the expertise of staff at all levels. An LEA's plan should not just include the math department but encourage collaboration and the inclusion of others with deep knowledge about meeting the needs of the highest-need students, including multilingual, special education, and other departments. The adoption process of math instructional materials will be much stronger with these partners' expertise, which will also strengthen the strategies being shared with staff through professional development with staff working together.

5

Learn more about high-quality instructional materials and the Mathematics Framework

The more governance teams understand the issues related to effective math instructional materials and instruction, the better the evaluation of options will be. CSBA encourages board members to continue to learn more about HQIMs and the Mathematics Framework by holding a board study session on this topic, asking the superintendent for more information on LEA plans, and continuing to review the various resources available to governance teams (see Resources section below).

Conclusion

The imperative to provide all students, particularly ELs, with high-quality instructional materials in mathematics cannot be overstated. While the current educational landscape in California is marked by alarming disparities in math proficiency among ELs, governance teams have a crucial opportunity to enact meaningful change. The implementation of the new Mathematics Framework serves as a pivotal moment for LEAs to commit to rigorously evaluating and adopting HQIMs.

By embracing the five essential components of HQIMs highlighted in this brief, governance teams can ensure that every student receives equitable access to rigorous math instruction. The recommended actions outlined in this brief empower governance teams to not only define high-quality instructional materials within their contexts but also create a structured review process that prioritizes the needs of all ELs and all learners. Furthermore, fostering collaboration among various LEA departments and investing in meaningful implementation and professional learning opportunities will increase the impact of investments in these materials.

The new Mathematics Framework presents an opportunity to pave the way for a more equitable educational landscape where all learners can thrive across all content areas. The commitment of board members will be pivotal in turning this vision into reality for all students.

Resources

All relevant CSBA resources can be found in the [Adopting Instructional Materials](#) landing page.

CSBA publications

- ▶ [High-Quality Professional Development to Support Instructional Materials Adoption Aligned with the New Math Framework](#) (January 2025). This joint publication of the Learning Policy Institute and CSBA examines the instructional changes needed to align with the Mathematics Framework and the role governance teams play in providing effective professional development opportunities for staff.
- ▶ [Instructional Materials Adoptions: State and Local Governing Board Processes, Roles, and Responsibilities](#) (February 2024). This governance brief covers the role of the state and local governing boards in the adoption of instructional materials.
- ▶ [Instructional Materials Adoptions: Local Governing Board Responsibilities](#) (February 2024). This fact sheet summarizes the key responsibilities of local governing boards in the adoption of instructional materials.
- ▶ [State Roles, Responsibilities, and Process for Instructional Materials Adoption](#) (February 2024). This fact sheet summarizes the state role and process for instructional materials adoptions.

CSBA webinars and presentations

- ▶ High-Quality Professional Development for Mathematics Instruction | Presentation Slides
- ▶ Before the Adoption: Creating the conditions for a High-Quality Mathematics Program | Presentation Slides
- ▶ Laying the Foundation for a Successful Instructional Materials Adoption: School Board Strategies | Presentation Slides
- ▶ Before the Adoption: Creating the conditions for a High-Quality Mathematics Program | Presentation Slides
- ▶ 2024 Annual Education Conference session: [Navigating the Instructional Materials Adoptions Process for Math and More](#)

CSBA sample policies

CSBA [GAMUT Policy](#) and [Policy Plus](#) subscribers have access to the most up-to-date CSBA sample policy language. The following sample board policies (BP), board bylaws (BB), and administrative regulations (AR) have been developed for LEAs to use in formulating and adopting their own policies relevant to instructional materials:

- ▶ BP/AR 6143 – Courses of Study
- ▶ BP/AR 6152.1 – Placement in Mathematics Courses
- ▶ BP/AR/E(1) 6161.1 – Selection and Evaluation of Instruction Materials
- ▶ BP 6161.11 – Supplementary Instructional Materials
- ▶ BB 9000 – Role of the Board

Additional relevant resources

- ▶ [2023 California Mathematics Framework](#) (adopted July 2023) from the California Department of Education.
- ▶ [Defining High-Quality Instructional Materials for Mathematics: Centering the Assets and Needs of Multilingual Learner and English Learner Students](#) (November 2023) by the High-Quality Instructional Materials Learning Partners Coalition, comprising Californians Together, The Education Trust-West, English Learners Success Forum, Loyola Marymount University Center for Equity for English Learners, the Partnership for Los Angeles Schools, the San Joaquin County Office of Education, and UnboundEd.
- ▶ [Guidance for Local Instructional Materials Adoptions](#) (adopted March 2024) from the California Department of Education.

- ▶ [Criteria for Review of Instructional Materials’ Success in Addressing Multilingual Learner \(MLL\) Linguistic and Instructional Needs](#) (September 2022) by the California Curriculum Collaborative, in partnership with EdReports, EdSolutions, the English Learners Success Forum, and UnboundEd (previously PivotLearning).
- ▶ [Guidelines for Improving Math Materials for Multilingual Learners](#) by the English Learner Success Forum.
- ▶ [Integrating the CA ELD Standards into K–12 Mathematics and Science Teaching and Learning: A Supplementary Resource](#) (December 2015) by WestEd for the California Department of Education.

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Endnotes

- 1 California Assessment of Student Performance and Progress, “English Language Arts/Literacy and Mathematics Smarter Balanced Summative Assessments.” Accessed February 24, 2025 from <https://caaspp-elpac.ets.org/caaspp/DashViewReportSB?ps=true&lstTestYear=2024&lstTestType=B&lstGroup=1&lstSubGroup=1&lstSchoolType=A&lstGrade=13&lstCounty=00&lstDistrict=00000&lstSchool=0000000>
- 2 California Department of Education, “Mathematics Framework.” Accessed from <https://www.cde.ca.gov/ci/ma/cf/>
- 3 The High Quality Instructional Materials Learning Partners Coalition (2023), “Defining High-Quality Instructional Materials for Mathematics: Centering the Assets and Needs of Multilingual Learner and English Learner Students.” Accessed from <https://west.edtrust.org/wp-content/uploads/2024/01/Defining-High-Quality-Instructional-Materials-for-Mathematics.pdf>
- 4 See Endnote 2
- 5 California Department of Education, “English Language Development Standards.” Accessed from <https://www.cde.ca.gov/sp/ml/eldstandards.asp>
- 6 California Department of Education, “Culturally Sustaining Pedagogy.” Accessed from <https://www.cde.ca.gov/ci/pl/culturallysustainingped.asp>
- 7 California Department of Education, “Formative Assessment and Tools for Teachers FAQs.” Accessed from <https://www.cde.ca.gov/ta/tg/sa/formativeassessfaq.asp>
- 8 California Department of Education, “Smarter Balanced Interim Assessments.” Accessed from <https://www.cde.ca.gov/ta/tg/sa/sbacinterimassess.asp>