

Supporting California English Learners

Understanding Mathematics Reports

In California, where nearly 25 percent of students are English Learners (ELs), it is critical to consider the specific needs of these students with each new instructional materials adoption. Regardless of subject-matter or discipline, local education agencies have a responsibility to ensure materials adoption committees have familiarity with the English Language Development (ELD) Framework, in addition to the subject-matter expertise needed to select wisely. Knowledge and understanding of the content present in materials, along with the strategies for supporting language acquisition, assures that ELs won't be left out of the consideration.

EdReports.org does a thorough review for the Common Core State Standards - Mathematics content and the key instructional shifts within every product; however, California also has specific ELD emphases and values that are included in the ELA/ELD Framework and intended for cross-discipline consideration. Below, you'll find California's key values for educating English Learners. These values expand on the goals in the California ELD Standards and frame the work across all grades and disciplines. Evidence of these values can be found within EdReports' review language, and we've noted the places within a review where you can locate that information with a focus on language development and mathematical sense-making

We recommend you begin by reading the report for your program or program options, noting the alignment to the mathematics standards since the most important criteria for materials is that they are well-aligned to the grade-level expectations for mathematics. Once you have thoroughly read the EdReports review to assess a program options' alignment with standards, this tool can help you assess how the materials reflect the critical elements and values of the ELA/ELD Framework. Take time to highlight any criteria in the report where you still have outstanding questions. You'll note that there are discipline-specific criteria for Rigor and the Mathematical Practices, as well as criteria for teaching and learning. For each criterion, use the materials (student and teacher's editions) to better understand in what ways they meet/do not meet the expectations. Use the guiding questions to steer the adoption committee while they are investigating materials for alignment to the standards, instructional shifts, and ELD Framework.

For a more in-depth review with a special focus on English Learners, see our resource linked [here](#) as well as the [Principles for Design of Math Curricula](#) from Understanding Language/SCALE at Stanford and the [Guidelines for Improving Math Materials](#) from the English Learner Success Forum.

California Values for Educating English Learners*

- **Valuing Language and Culture as Assets:** English learners receive instruction that values their home cultures and primary languages as assets and builds upon them for new learning.
- **Ensuring Equity in Intellectual Richness:** English learners benefit from the same high expectations of learning established for all students and routinely engage in intellectually rich tasks and texts across the disciplines.
- **Building Content Knowledge and Language in Tandem:** English learners engage in instruction that promotes content and language learning in tandem in all disciplines, including ELA, mathematics, social studies, science, the fine arts, and other subjects. Further, ELs have full access to a multi-disciplinary curriculum.
- **Attending to Specific Language Learning Needs:** English learners' content and language learning is fostered when targeted language instruction builds into and from content learning and attends specifically to English language proficiency levels and prior educational experiences in the primary language and English.
- **Integrating Domains of Communication:** English learners develop full proficiency in English in the integrated domains of listening, speaking, reading, and writing, consistent with expectations for all students.
- **Providing Appropriate Scaffolding:** English learners thrive in instructional environments where teachers intentionally support them to fully engage with intellectually challenging content using strategic scaffolding. Scaffolding is tailored to student needs with the ultimate goal of student autonomy.
- **Evaluating Progress Appropriately:** English learners' progress in developing content knowledge and academic English are best evaluated with intentional, appropriate, and valid assessment tools that take into account English language proficiency levels, primary language literacy, and cultural backgrounds. Formative assessment as a pedagogical practice allows teachers to adjust instruction and provide feedback in a timely manner.
- **Sharing the Responsibility:** English learners' positive educational experiences and academic success is a responsibility shared by all educators, the family, and the community.

*CA ELD Framework Introduction, pg. 11

CA ELD Values	EdReports Indicators
<p>Valuing Language and Culture as Assets: English learners receive instruction that values their home cultures and primary languages as assets and builds upon them for new learning.</p>	<p>Indicators 2c, 1a.ii (HS), 3s and 3t: drawing on students' home language and cultural/linguistic backgrounds. Also, <i>Application and Mathematical Modeling</i> are opportunities for materials and teachers to vary the contexts in which problems are presented.</p>
<p>Ensuring Equity in Intellectual Richness: English learners benefit from the same high expectations of learning established for all students and routinely engage in intellectually rich tasks and texts across the disciplines.</p>	<p>Indicators 1b, 2.1 and 2e: extensive work with major content, rich tasks, overall rigor (balance of procedural skill, conceptual knowledge and application); and: MP 1 - make sense of problems, MP 2 - reasoning, MP 3- constructing arguments.</p>
<p>Building Content Knowledge and Language in Tandem: English learners engage in instruction that promotes content and language learning <i>in tandem</i> in all disciplines, including ELA, mathematics, social studies, science, the fine arts, and other subjects. Further, ELs have full access to a multi-disciplinary curriculum.</p>	<p>Indicators 1d, 1e and 1f: regular and active participation in the mathematics of the grade building on previous knowledge promotes opportunities to learn the language of mathematics.</p>
<p>Attending to Specific Language Learning Needs: English learners' content and language learning is fostered when targeted language instruction builds <i>into</i> and <i>from</i> content learning and attends specifically to English language proficiency levels and prior educational experiences in the primary language and English.</p>	<p>Indicators 2h and 3q: MP 6 - specialized language of the content, and active participation in mathematics with differentiation and teacher guidance to identify and follow-up on content vs language acquisition all work together to build content and language knowledge.</p>
<p>Integrating Domains of Communication: English learners develop full proficiency in English in the integrated domains of listening, speaking, reading, and writing, consistent with expectations for all students.</p>	<p>Indicators 2f and 3q: MP3 - construct viable arguments and critique others and opportunities for speaking, listening, reading, and writing to develop practices and knowledge of mathematics.</p>
<p>Providing Appropriate Scaffolding: English learners thrive in instructional environments where teachers intentionally support them to fully engage with intellectually challenging content using strategic scaffolding. Scaffolding is tailored to student needs with the ultimate goal of student autonomy.</p>	<p>Indicators 3m and 3o: differentiated lessons, grouping strategies and multi-modal learning opportunities tailored to student needs.</p>

CA ELD Values	EdReports Indicators
<p>Evaluating Progress Appropriately: English learners’ progress in developing content knowledge and academic English are best evaluated with intentional, appropriate, and valid assessment tools that take into account English language proficiency levels, primary language literacy, and cultural backgrounds. Formative assessment as a pedagogical practice allows teachers to adjust instruction and provide feedback in a timely manner</p>	<p>Indicators 3j, 3k, 3l and 3o: writing, speaking and performance tasks to show understanding of content, teacher guidance to identify and follow-up on content vs language acquisition; students monitor their own language development are discipline-specific opportunities for formative assessment.</p>
<p>Sharing the Responsibility: English learners’ positive educational experiences and academic success is a responsibility shared by all educators, the family, and the community.</p>	<p>While critical to the support of English learners, EdReports does not evaluate materials for this value.</p>

Guiding Questions When Reading the Reports

- To what extent do the materials give explicit directions for teachers to engage students in making meaning and sense of mathematics and the language of mathematics?
- How do the materials offer students various opportunities to express their understanding and ideas to others?
- To what extent are the materials focused on the assets and experiences students bring into mathematics learning?
- How do the materials make learning visible and encourage students to “think about their own thinking”?