

Understanding Language Initiative at Stanford University - http://ell.stanford.edu/teaching_resources/math

Understanding Language: Language, Literacy, and Learning in the Content Areas is a collective of experts in the field of language and content area teaching and learning, currently led by Kenji Hakuta and Maria Santos, with the aim of developing research and resources to increase awareness of how essential it is for all students, but especially English Learners, to learn the language of each academic discipline so they can rigorously and authentically engage with its content, as is intended by the CCSS. A collection of CCSS-aligned mathematics tasks with annotations and other resources are included in the download “Supporting ELLs in Mathematics.”

Illustrative Mathematics - <https://www.illustrativemathematics.org>

This site provides high quality, rigorously reviewed tasks from teacher leaders across the nation to illustrate the Common Core standards for mathematics. The site contains curriculum, professional learning, content standards, practice standards, blueprints, progressions and the Illustrative Mathematics Middle School Curriculum designed to include adaptations and scaffolding support for English learners.

Mathematics Improvement Network - <http://mathnic.org>

The Mathematics Network of Improvement Communities (Math NIC) has developed nine prototype tools to assist in the improvement of mathematics programs and instruction. The topics include Teaching for Robust Understanding, Lesson Study for Professional Development, Developing Mathematical Proficiency, Formative Assessment, and Mathematical Practices, among others. The free materials are designed to support workshop-style professional learning sessions and each module (designed to be 90-120 minutes) includes a leader guide, PowerPoint slides, handouts and videos.

Youcubed - <https://www.youcubed.org>

This Stanford center provides mathematics education resources to teachers, students and parents that support “open, creative mathematics.” The site includes tasks, videos, courses, evidence, and books on topics such as visual mathematics, growth mindset, depth not speed, brain science, and group work.

California Mathematics Project - <http://www.cmpso.org>

The California Mathematics Project provides formal partnerships with schools and/or districts to deliver services to teachers of mathematics in high-poverty and diverse schools. The project provides English Language Development (ELD) assistance and materials that support mathematics and literacy and identifies, develops, and sustains mathematics teacher leaders in education communities, and expands statewide opportunities for professional development. The project supports 19 regional sites located on university campuses.

Mathematics Assessment Project - <http://map.mathshell.org/>

The Mathematics Assessment Project set out to design and develop well-engineered tools for formative and summative assessment that expose students’ mathematical knowledge and reasoning, helping teachers guide them towards improvement and monitor progress. The tools are relevant to any curriculum that seeks to deepen students’ understanding of mathematical concepts and develop their ability to apply that knowledge to non-routine problems. The materials provided include summative tests or tasks and classroom challenges.

Colorín Colorado - <http://www.colorincolorado.org/teaching-ells/content-instruction-ells/math-instruction-ells>

Colorín Colorado is a national multimedia project that offers research-based information, activities, and advice for educators and families of ELs. The website’s page on mathematics instruction for ELs offers strategies, resources, and guidance for helping ELs succeed in mathematics.

Understanding Proficiency - <https://understandingproficiency.wested.org>

This website was developed by a partnership between WestEd and SCALE. The website provides student work samples scored and annotated by teachers on performance tasks in Mathematics and ELA/Literacy in grades 3-8 and high school. The site additionally provides professional development tools with suggested activities for using the resources, including videos of educators scoring and discussing student work.

Teaching High School Math Using SDAIE - <http://web.stanford.edu/dept/gse/cgi-bin/clad/elr012/>

This collection of resources includes videos, assignments, and links to articles and information that discuss the multiple ways in which language develops and is present in math classrooms. Educators are encouraged to incorporate Specially Designed Academic Instruction in English (SDAIE) strategies into instruction in order to address both content and language objectives effectively within the same math lesson.

TODOS: Mathematics for ALL-Excellence and Equity in Mathematics - <http://www.todos-math.org/>

TODOS is an organization affiliated with the National Council of Teachers of Mathematics that operates on the belief that “we must work to create a more just, humanizing, and equitable mathematics education experience for all.” The website has publications, parent and family resources, and information about TODOS events.

California Mathematics Framework Chapter: Universal Access

<http://www.cde.ca.gov/ci/ma/cf/documents/mathfwuniversalaccess.pdf>

This chapter provides information on differentiation, Universal Design for Learning, language demands of the CA CCSSM, assessment, MTSS, accommodations, assistive technology, and beginning on page 683, planning instruction for California’s English learners. Mathematics discourse, meeting the needs of long term English learners, and planning instruction for English learners are discussed.

California Common Core State Standards Mathematics Resources

<https://www.mydigitalchalkboard.org/portal/default/Resources/CollectionView/CollectionView?action=2&id=501332>

This page contains 28 links to resources for teaching the Common Core Mathematics Standards including Engage New York, Achieve the Core, lessons, videos, professional learning modules, and a wide variety of resources for supporting implementing effective instruction.

English Language Development Standards

<https://www.wida.us/standards/eld.aspx> (national)

<http://www.cde.ca.gov/sp/el/er/documents/eldstndpublication14.pdf> (California)

Integrating the CA ELD Standards into K–12 Mathematics and Science Teaching and Learning

Located on this page: <http://www.cde.ca.gov/sp/el/er/eldstandards.asp>

This resource specifies the correspondences between the CA ELD Standards and the CA Common Core Math Standards and provides illustrative examples of the implementation of the CA ELD Standards in tandem with the CA CCSSM and the CA NGSS. It is designed as a supplementary resource to the California curriculum frameworks for English language arts/English language development (ELA/ELD), mathematics, and science, as well as to the CA ELD Standards, CA CCSSM, and CA NGSS documents themselves.