**Appendix I: Application of Standards for English Learners and Students with Disabilities**

**English Learners**

The Massachusetts Department of Elementary and Secondary Education (ESE) strongly believes that all students, including English learners (ELs) should be held to the same high expectations outlined in the Curriculum Framework. English learners may require additional time and support as they work to acquire English language proficiency and content-area knowledge simultaneously. Further, developing proficiency in English takes time, and teachers should recognize that it is possible to meet the standards for mathematical content and practices as students become fluent in English.

The structure of programs serving ELs in Massachusetts acknowledges that ELs acquire language while interacting in all classrooms. All educators, including mathematics teachers, are responsible for students’ language development and academic achievement. Collaboration and shared responsibility among administrators and educators are integral to student and program success. ESE uses the term *English language development* (ELD) to describe all of the language development that takes place throughout a student’s day, both during sheltered content instruction (SCI) in math and in ESL classrooms. Together SCI and ESL comprise a complete program of sheltered English immersion (SEI).[[1]](#footnote-1)

Districts in Massachusetts must provide EL students with both grade-level academic math content and ESL instruction that is aligned to the World Class Instructional Design and Assessment standards or [WIDA](https://www.wida.us/standards/eld.aspx) and the Curriculum Frameworks as outlined in [state guidelines for EL programs](http://www.doe.mass.edu/ell/guidance). ESE’s [Office of English Language Acquisition and Academic Achievement](http://www.doe.mass.edu/ell/) (OELAAA) offers a number of [resources](http://www.doe.mass.edu/ell/curriculum.html) to help districts meet these expectations, including a [Next-Generation ESL Curriculum Resource Guide](http://www.doe.mass.edu/ell/curriculum/ResourceGuide.pdf), a set of ESL [Model Curriculum Units](http://www.doe.mass.edu/candi/model/download_form.aspx) with connections to ESE Model Curriculum Units (MCUs) in various content areas, and a [Collaboration tool](http://www.doe.mass.edu/ell/curriculum/CollaborationTool.pdf) that supports WIDA standards implementation in conjunction with the Massachusetts Curriculum Frameworks. In partnership with educators, as well as other state and national experts, OELAAA is also developing a suite of updated SEI resources including comprehensive programmatic and curricular guidance for districts and eight new sheltered content immersion MCUs.

Regardless of the specific curriculum used, *all* ELs in formal educational settings must have access to:

* District and school personnel with the skills and qualifications necessary to support ELs’ growth.
* Literacy-rich environments where students are immersed in a variety of robust language experiences.
* Speakers of English who know the language well enough to provide models and support.

Yet English learners are a heterogeneous group, with differences in cultural background, home language(s), socioeconomic status, educational experiences, and levels of English language proficiency. Educating ELs effectively requires diagnosing each student instructionally, tailoring instruction to individual needs, and monitoring progress closely and continuously. For example, ELs who are literate in a home language that shares cognates with English can apply home-language vocabulary knowledge when reading in English; likewise, those with extensive schooling can use conceptual knowledge developed in another language when learning academic content in English. Students with limited or interrupted formal schooling ([SLIFE](http://www.doe.mass.edu/ell/guidance/SLIFE-Guidance.pdf)) may need to acquire more background knowledge before engaging in the educational task at hand.

Six key principles should therefore guide instruction for ELs:[[2]](#footnote-2)

* Instruction focuses on providing ELs with opportunities to engage in math-specific practices that build conceptual understanding and language competence in tandem.
* Instruction leverages ELs’ home language(s), cultural assets, and prior math knowledge.
* Standards-aligned instruction for ELs is rigorous, grade-level appropriate, and provides deliberate, appropriate, and nuanced scaffolds.
* Instruction moves ELs forward by taking into account their English proficiency level(s) and prior schooling experiences.
* Instruction fosters ELs’ autonomy by equipping them with the strategies necessary to comprehend and use language in mathematics classrooms.
* Responsive diagnostic tools and formative assessment practices measure ELs’ mathematics content knowledge, language competence, and participation in mathematics practices.

In sum, the *Massachusetts Curriculum Framework for Mathematics* articulates rigorous grade-level expectations in the standards for mathematics content and mathematics practice to prepare all students, including ELs, for postsecondary education, careers, and everyday life. This document can be used in conjunction with language development standards designed to guide and monitor ELs’ progress toward English proficiency. Many English learners also benefit from instruction on negotiating situations outside of schooling and career—instruction that enables them to participate on equal footing with English proficient peers in all aspects of social, economic, and civic life. Whether academic, linguistic, or social, support for ELs must be grounded in respect for the great value that multilingualism and multiculturalism add to our society.

**Students with Disabilities**

The *Massachusetts Curriculum Framework for Mathematics* articulates rigorous grade-level expectations. These learning standards identify the mathematical knowledge and skills all students need in order to be successful in college and careers and in everyday life. Students with disabilities—students eligible under the Individuals with Disabilities Education Act (IDEA)—must be challenged to excel within the general mathematics curriculum and be prepared for success in their post-school lives, including college and/or careers. The standards provide an opportunity to improve access to rigorous mathematics content for students with disabilities. The continued development of understanding about research-based instructional practices and a focus on their effective implementation will help improve access to the mathematics content standards and the mathematics practice standards for all students, including those with disabilities.

Students with disabilities are a heterogeneous group. Students who are eligible for an Individualized Education Program (IEP) have one or more disabilities and, as a result of the disability/ies, are unable to progress effectively in the general education program without the provision of specially designed instruction, or are unable to access the general mathematics curriculum without the provision of one or more related services [(603 CMR 28.05 (2)(a)(1)](http://www.doe.mass.edu/lawsregs/603cmr28.html?section=05). *How* these high standards are taught and assessed is of importance in reaching students with diverse needs. In order for students with disabilities to meet high academic standards, their math instruction must incorporate individualized instruction or related services, supports, and accommodations necessary to allow the student to access the general mathematics curriculum. The annual goals included in students’ IEPs must be carefully aligned to and facilitate students’ attainment of grade-level learning standards.

Promoting a culture of high expectations for all students is a fundamental goal of the Massachusetts Curriculum Frameworks. In order to participate successfully in the general curriculum, students with disabilities may be provided additional supports and services as identified in their IEPs, including:

* Instructional learning supports based on the principles of Universal Design for Learning (UDL) which foster student engagement by presenting information in multiple ways and allowing for diverse avenues of demonstration, response, action, and expression. UDL is defined by the Higher Education Opportunity Act (PL 110-135) as “a scientifically valid framework for guiding educational practice that (a) provides flexibility in the ways information is presented, in the ways students respond or demonstrate knowledge and skills, and in the ways students are engaged; and (b) reduces barriers in instruction, provides appropriate accommodations, supports, and challenges, and maintains high achievement expectations for all students, including students with disabilities and students who are limited English proficient.”
* Instructional accommodations (Thompson, Morse, Sharpe & Hall, 2005), such as alternative materials or procedures that do not change the standards or expectations, but allow students to learn within the framework of the general curriculum.
* Assistive technology devices and services to ensure access to the general education curriculum and the Massachusetts standards for mathematics.

Some students with the most significant cognitive disabilities will require substantial supports and accommodations to have meaningful access to certain standards in both instruction and assessment, based on their expressive communication and academic needs. These supports and accommodations must be identified in the students’ IEPs and should ensure that students receive access to multiple means of learning, and opportunities to demonstrate knowledge, but at the same time retain the rigor and high expectations of the Mathematics Curriculum Framework.

**References:** Individuals with Disabilities Education Act (IDEA), 34 CFR §300.34 (a). (2004).

Individuals with Disabilities Education Act (IDEA), 34 CFR §300.39 (b)(3). (2004).

Thompson, Sandra J., Amanda B. Morse, Michael Sharpe, and Sharon Hall. “Accommodations Manual: How to Select, Administer and Evaluate Use of Accommodations and Assessment for Students with Disabilities,” 2nd Edition. Council for Chief State School Officers, 2005 http://www.ccsso.org/content/pdfs/AccommodationsManual.pdf. (Accessed January 29, 2010).

1. 30 For more on types of English Learner Education (ELE) programs in Massachusetts, please see [Guidance on Identification, Assessment, Placement, and Reclassification of English Language Learners](http://www.doe.mass.edu/ell/guidance/default.html). [↑](#footnote-ref-1)
2. For more on the Six Key Principles for EL Instruction, please see [Principles for ELL Instruction](http://ell.stanford.edu/content/principles-ell-instruction-january-2013) (2013, January). Understanding Language. [↑](#footnote-ref-2)