

Connecticut Core Standards Mathematics for English Learners



About the Meeting the Challenge Series

The goal of the Meeting the Challenge professional learning series is to empower educators to implement CT Core Standards aligned curriculum, instructional practices, and assessments to meet the needs of a wide variety of learners. The first module, *Supporting Success for ALL Students with the CT Core Standards*, provides guidance for building and maintaining inclusive learning environments that meet the challenge and the promise of the CT Core Standards for every student. While it focuses on the role of school leaders and coaches, the information is pertinent and recommended for all educators. The other four modules in the series provide educators with practical instructional strategies and resources to deepen their knowledge of the rigorous expectations of the standards and build their capacity to support all learners. Two of these modules address the needs of students with disabilities and two address the needs of English Learners; in each



strand one module focuses on the Mathematics Standards and the other on the English Language Arts and Literacy Standards.

Module Description

Connecticut Core Standards Mathematics Success for English Learners explores the challenges and opportunities the Connecticut Core Standards for Mathematics present for English Learners and the instructional supports teachers can use to help ELs at different proficiency levels master grade-level standards. The module begins with an overview of the structure of the standards and the three key instructional shifts. Then, a definition of the "language of math" is provided. This definition focuses on the idea that math language is more than math vocabulary terms and definitions – it includes all communicative processes students must use to be successful in the math classroom. Next, educators examine the 8 Standards for Mathematical Practice to develop a better understanding of the skills these standards require of students in grades K-12 and the specific language demands these standards pose for ELs. Participants then learn about instructional supports for ELs to help them meet the demands of the CCS Math Standards. These instructional supports are structured around the National Council of Teachers of Mathematics' Four Dimensions of Instruction for ELs: 1) Engage all learners in a diverse classroom environment; 2) Use instructional strategies to make content more accessible; 3) Support classroom discussion in math; and 4) Assess to meet students' needs.



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Participant Outcomes

After completing this module, participants will be able to:

- Describe the three key instructional shifts the CCS Mathematics represent for math learning.
- Identify the reasons why math may be challenging for ELs.
- Define the "language of math."
- Name the 8 Standards for Mathematical Practice and articulate several language demands these standards pose for ELs.
- Summarize the NCTM Dimensions of Instruction for ELs and the specific instructional supports they promote.

Module Outline

Section 1: Introduction

- Welcome and Module Objectives
- Pre-Assessment

Section 2: The Standards and Key Instructional Shifts

- The Math Standards
- The 3 Instructional Shifts
- Implications for English Learners

Section 3: The Language of Math

- English Language Proficiency Standards and Levels
- Language Demands in Math
- Teaching with Content and Language Objectives
- Math Language in the Classroom

Section 4: Examining the Practice Standards

- Overview of the Standards for Mathematical Practice
- Identifying Language in a Math Lesson

Section 5: Language Supports for ELs

- The Four Dimensions of EL Instruction
- Engage all Learners in a Diverse Classroom Environment
- Use Instructional Strategies to Make Content More Accessible
- Support Classroom Discussion in Math
- Assess to Meet Students' Needs

Section 6: Conclusion

- Culminating Ideas
- Post-Assessment