

MA110M Standards for Mathematical Content (Grades 6-8)



Course Outline

In this course, Introduction to the Common Core State Standards for Mathematical Content, you will explore the structure of the content standards, learn about their connection to the Standards for Mathematical Practice, understand why they are important for your students, and consider implications for your classroom practice.

Some typical course activities include:

- Learning about the Standards for Mathematical Content
- Working on mathematics tasks
- Viewing and reflecting on expert video and video of classroom practice
- · Reading and reflecting on journal articles
- Connecting the content standards to your instructional practice
- Reflecting on your own learning

Goals & Purpose

Session 1 – Introduction to the Common Core State Standards for Mathematics

- Understand how the Common Core State Standards were developed
- Recognize the difference between the Mathematical Content Standards and the Standards for Mathematical Practice
- Take stock of your current level of comfort with implementing the Common Core
- Hear from authors of the Common Core
- Begin to consider implications of the Standards for Mathematical Content for your practice

Session 2 – Understanding the Structure of the Standards for Mathematical Content

- How the Common Core's Standards for Mathematical Content are organized
- What focus and coherence mean with regard to the content standards
- The importance of conceptual understanding, procedural skill and fluency, and application in a rigorous mathematics program
- Hear from authors of the Common Core
- Review a sample student task
- Begin to examine one of the domains of the grade 6-8 content standards



MA110M Standards for Mathematical Content (Grades 6-8)

Session 3 - Learning Progressions

- Background behind the Common Core learning progressions
- How big mathematical ideas are situated within a learning progression
- How middle school-level clusters within a domain relate to elementary-level and high school-level clusters
- Learn about the role of learning progressions in the development of the Common Core State Standards for Mathematics
- Look at an example of a middle school learning progression
- Examine how the middle school progression builds on an elementary-level progression and prepares students for the following high school-level progression

Session 4 – Connecting the Standards for Mathematical Content to the Standards for Mathematical Practice

- How the Standards for Mathematical Content can be connected to the Standards for Mathematical Practice (SMPs)
- How the SMPs are integrated in a learning progression
- Review SMPs and their connection to a learning progression
- Examine how the content standards can be supported by the SMPs
- Revisit the Pool Border task and video

Session 5 – Standards for Mathematical Content Summary

- Know how the Common Core's Standards for Mathematical Content are organized
- Describe how the Standards for Mathematical Content and the Standards for Mathematical Practice are different from each other and how they complement each other
- Discuss what focus and coherence mean with regard to the content standards
- Understand how big mathematical ideas are situated within a learning progression
- Create learning opportunities in which students engage in the SMPs as they deepen their understanding of the mathematical content
- Review information and/or activities you completed in earlier sessions
- Reflect on strategies for supporting students in developing proficiency in the content standards and SMPs
- Take stock of what you've learned about the Common Core Standards for Mathematical Content and how comfortable you feel with implementing them in your classroom

Throughout the course, opportunities are provided for teachers to connect their learning across sessions and to explicitly consider the implications of that learning for classroom practice. Teachers will also be able to revisit their work and reflections by viewing their individual Course Portfolios.