



Course Outline

In this course, Introduction to the Common Core State Standards for Mathematical Content, teachers will explore the structure of the content standards, learn about their connection to the Standards for Mathematical Practice, understand why they are important for students, and consider implications for 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 instructional practice
- Reflecting on one's own learning

Goals & Purpose

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

- Learn how the Common Core State Standards were developed
- Understand the difference between the Standards for Mathematical Content 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

- Understand how the Common Core's Standards for Mathematical Content are organized
- Identify what focus and coherence mean with regard to the content standards
- Recognize 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 conceptual categories for high school

Session 3 – Learning Progressions

- Review background behind the Common Core learning progressions
- Identify how big mathematical ideas are situated within a learning progression
- Recognize how high school-level clusters within a domain relate to middle 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 high school learning progression
- Examine how the high school progression builds on the middle school-level progression

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

- Learn how the Standards for Mathematical Content can be connected to the Standards for Mathematical Practice (SMPs)
- Understand 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.