Getting Started: Other High School Mathematics Courses
For High School Mathematics Courses other than Algebra I and Geometry

This material is extracted from the published CPS Mathematics Content Framework. Please refer to that document for the complete set of information; it is available on both the CPS KM website and the Department of Mathematics and Science website.

As defined in the CPS Bridge Plan for Mathematics, in Year 1 of the transition to CCSS-M, 2012-2013, the focus on high school mathematics courses is on Algebra I and Geometry.

The following planning outline will help all teachers of high school mathematics courses, other than Algebra I and Geometry, as they begin the transition to CCSS-M in their classrooms.

1. Become familiar with the published CPS Mathematics Content Framework-Version 1.0, including the instructional shifts and the CPS Bridge Plan for Mathematics.
2. Use the CCSS-M materials to become familiar with Standards for Mathematical Practice. Teams are encouraged to work together to develop new instructional approaches that support these practice standards.
3. Become familiar with:
   a. The kinds of high-cognitive demand tasks that are expected by the CCSS-M
   b. Ways to analyze and modify tasks in current instructional materials for rigor
   c. Techniques to enhance the rigor of current instructional materials. General mathematics resources and tools support the kind of learning expected in the CCSS-M. For example, MARS (Mathematics Assessment Resource Service) tasks balance content and practice, for an integrated approach to instruction and performance assessment. Check out the general mathematics tools and resources that are part of the CPS Mathematics Content Framework materials on the CPS KM website or the Department of Mathematics and Science website
4. Consider the three instructional shifts that teachers must implement in order to support student success in meeting the CCSS-M (as described in the Framework document). What instructional strategies are already being used that support these shifts? What adjustments to instruction are needed to address the instructional shifts? Integrating the Standards for Mathematical Practice into instruction may involve substantial shifts in instructional strategies.
5. Use your current instructional materials as a starting point.
6. To the extent possible, integrate the Standards for Mathematical Practice into instruction. Every teacher is strongly encouraged to apply the Standards for Mathematical Practice into every CPS mathematics classroom and activity even though teachers may not be implementing the content standards this year. Integrating mathematical practices into instruction may involve substantial shifts in instructional strategies (such as the art of open-ended questioning)
7. Begin to increase rigor of mathematical tasks. Use the general mathematics tools and resources published as part of the CPS Mathematics Content Framework material to assess your lessons for rigor and supplement your current instructional materials, as appropriate.
8. Consider how to upgrade assessments to reflect the work you are doing with the Standards for Mathematical Practice. For example, choose problems with higher cognitive demand, such as open-ended or extended/constructed response.