Common Core Self-Assessment Tool
Higher Education & Teacher Preparation Faculty

by Ross Wiener and Candice McQueen, June 2014

Introduction to the Self-Assessment Tool: Mathematics Instruction

The Common Core State Standards articulate learning objectives for students in grades K-12 in mathematics and literacy. More than 40 states and Washington, DC have adopted these academic standards, making the vast majority of prospective teachers responsible for teaching them. Common Core standards represent a paradigm shift for teaching and learning in K-12 in several significant ways, presenting an exciting and challenging opportunity to improve education in broad and deep ways.

Teacher preparation programs have a special opportunity and responsibility to integrate Common Core into the experience and instruction of aspiring teachers so that new teachers can successfully use the Common Core to improve student learning. *This self-assessment tool was developed specifically to assist higher education faculty in exploring the extent to which Common Core is reflected in the content and instruction of teacher preparation courses.*

What distinguishes Common Core standards? First, the standards are explicitly aimed at preparing *all* students for success in postsecondary education and career pursuits. In practical terms, this means an emphasis on developing students' critical thinking, problem-solving, collaboration, and communication skills. These higher-level expectations are vital for making education outcomes more equitable, but many aspiring teachers have not benefitted from these expectations or experiences in their own education. Teacher preparation must cover the content of Common Core while at the same time modeling instruction that helps teachers understand and achieve Common Core expectations.

Second, Common Core standards are relatively brief compared to prior standards and written in clear, concise language. If you have not had the opportunity to read the standards for yourself, that's an important first step to using this guide because nothing can substitute for direct knowledge of the actual standards. Tomorrow's teachers enter a profession that is governed by the Common Core; responsibility for preparing these teachers demands familiarity with these foundational standards.

After becoming familiar with the standards, this self-assessment can assist you in determining if you have considered the full depth and breadth of the standards as it impacts both *what* you teach and *how* you teach aspiring teachers. This tool can be used for collaboration and conversation with colleagues, as a springboard for professional learning with faculty or as an individual self-assessment for specific courses. The Common Core self-assessment tool has been designed to assess three different aspects of teacher preparation

programming. This set of question is designed for a self-assessment of Common Core mathematics courses for teachers. There are also reflection questions designed for courses preparing teachers for English-Language Arts and other courses that must integrate literacy instruction, as well as another set of self-assessment questions that allow faculty who teach introductory teacher preparation courses to assess their integration of the Common Core standards.

Completing this self-assessment and exploring the implications with colleagues can establish a lead role for teacher preparation in making the vision of Common Core a reality. The questions are offered as an open-source resource for faculty in teacher preparation programs and are meant to be augmented, adapted and modified in ways that support inquiry and continuous improvement in preparing teachers.

Course Assessment: Preparing Teachers for Common Core Mathematics Instruction

1. **In which of the following ways are students exposed to Common Core standards (check all that apply):**
    a. Applicable Common Core standards are included as course readings;
    b. Common Core standards are referred to in the syllabus and, as applicable, in lectures;
    c. There are course readings that discuss/explore the application of Common Core Mathematics standards and the Standards for Mathematical Practice to planning, instruction, and assessment;
    d. There are course readings that discuss/explore rigorous and engaging math tasks.
    e. Some or all assignments include the expectation that students explicitly reference applicable Common Core standards in completing the assignment;
    f. All or almost all course readings are at or above end-of-high school expectations for text complexity (defined in Appendix A of Common Core ELA standards).
    g. Students observe faculty in preparing and presenting lessons that model Common Core-aligned instruction in a K-12 classroom.

2. **Give approximate average number of time per class students are expected to:**
    a. Read a representation of instructional practice, or watch a video or role-playing exercise and refer to applicable Common Core standards in addressing issues that are raised;
    b. Discuss material with each other in small or large groups;
    c. Use the Common Core Mathematics standards and Standards for Mathematical Practice to create lesson plans, math tasks, and assessments;
    d. Prepare and present a lesson that integrates the Common Core Mathematics standards and Standards for Mathematical Practice.

3. **Give approximate average number of time per class students are expected to:**
    a. Complete and/or create authentic math tasks to enhance understanding of high-quality math tasks.
    b. Critique tasks/activities created by their peers and provide constructive feedback for improvement.
    c. Complete a math task employing strategic use of digital media that applies course learning to a practical problem of practice.
    d. Analyze student responses to math tasks and provide academic feedback.

4. In what ways are students expected to use/apply the Common Core Standards for Mathematical Practice in this course? (Inquiry can be repeated for multiple courses.)

5. **Which of the following aspects of the Common Core College and Career Anchor Standards (Reading, Writing, Speaking and Listening, and Language) are addressed in this course:**
    a. Reading a broad range of high-quality, challenging texts;
    b. Writing frequently for a range of audiences, tasks, and purposes;
    c. Opportunities to communicate and collaborate as a part of a whole class, in small groups, and with partners;
    d. Using technology to collaborate with others in drafting, editing, and publishing writing;
    e. Emphasize the importance of academic vocabulary in mathematics.

6. Will students examine research regarding academic vocabulary and its role in learning? How will they learn strategies for reinforcing academic vocabulary instruction in mathematics?

7. Do students gain experience explaining/defending their reasoning and critiquing the reasoning of others? How are instructional strategies for fostering these practices examined in this course?

8. What type(s) of technology will be used in this course? How will the technology used in this course enhance the teacher candidate's technology skills?

9. **In what ways will this course use technology to enhance learning? (check all that apply):**
    a. Class lectures and presentations
    b. On-line modules
    c. Discussion board posts
    d. Using technology to communicate and collaborate with others
    e. Creating lessons and presentations
    f. Developing math tasks that use technology as a tool for problem-solving
    g. Developing math tasks that use technology as a tool for presenting solutions

10. In what ways do students in this course learn how to craft assignments and/or assessments that measure mastery of CCSS, including assessing multiple standards in a single rich task?

11. In what ways will students gain experience with standardized assessments? In what ways will students gain experience analyzing and interpreting student data? Are PARCC or Smarter Balanced released assessment/prototype questions, or items from other Common Core-aligned assessments, being used as examples in this course?

12. How are students asked to assess the extent to which CCSS is reflected in this course?

13. How are you assessing the underlying math content that teacher candidates need to know to show content mastery and deep conceptual understanding?

This self-assessment tool was developed by **Ross Wiener**, vice president of the Aspen Institute, and **Dr. Candice McQueen**, Ph.D., Senior Vice President and Dean, College of Education, Lipscomb University; Dr. McQueen is also executive director of the Ayers Institute for Teacher Learning and Innovation.

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