

INSTRUCTIONAL PRACTICE EVIDENCE GUIDE FOR COMMON CORE STATE STANDARDS

Mathematics, Grades K-8

The Instructional Practice Evidence Guide is a tool for observing the effective integration of the Common Core State Standards for Mathematics (CCSSM) into instructional practice. This tool is intended for use by teachers, coaches and instructional leaders to support the development of CCSSM aligned instructional practice. The three key shifts required by the CCSSM are:

1. **Focus:** Focus strongly where the Standards focus.
2. **Coherence:** Think across grades, and link to major topics within grades.
3. **Rigor:** In major topics pursue conceptual understanding, procedural skill & fluency, and application with equal intensity.

When the shifts are effectively integrated into instructional practice, evidence of the following can typically be observed in an individual lesson and over the course of the year.

Teacher: _____ Class: _____ Date: _____

Lesson Focus: _____

EVIDENT IN EACH LESSON

1. Materials and instruction support the focus and coherence of the Standards.

A. All of the mathematical topics in the lesson are explicitly found in the Standards for Mathematical Content (and, more often than not, are in the major work of the grade).	Yes	No	Notes:
B. All students are given extensive opportunity to work with grade-level problems and exercises.	Evident	Not Fully Evident	
C. The lesson relates new concepts explicitly to students' prior knowledge and skills.	Evident	Not Fully Evident	
All of the above are true or evident:	Yes	No	

2. All students grow in their capacity for the three aspects of rigor in mathematics.

A. <i>Conceptual understanding:</i> Students develop their conceptual understanding of key mathematical concepts, where called for in specific content standards or cluster headings.	Evident	Not Fully Evident	Notes:
B. <i>Procedural skills & fluency:</i> Students learn or practice procedures required by the Standards, and/or work toward fluency in arithmetic.	Evident	Not Fully Evident	
C. <i>Application:</i> Students use mathematics in the context of engaging applications.	Evident	Not Fully Evident	
One or more of the above is evident:	Yes	No	

3. All students practice the discipline of mathematics in grade-appropriate ways.

During group work and in whole-class discussion...			Notes:
A. Students - working individually, in groups, or with the teacher - persevere in solving difficult and worthwhile problems.	Evident	Not Fully Evident	
B. Students construct viable arguments and critique the arguments of others.	Evident	Not Fully Evident	
C. Students explain their thinking and build upon their own and others' thinking.	Evident	Not Fully Evident	
D. Students and the teacher attend to the specialized language of mathematics with precision.	Evident	Not Fully Evident	
All of the above are evident:	Yes	No	

EVIDENT OVER THE COURSE OF THE YEAR

1. Focus: Students focus strongly where the Standards focus.	<i>Note evidence of how this lesson supports or doesn't support the expectations for Focus:</i>
<p>A. Students spend the large majority of their time, approximately three-quarters, on the major work of the grade¹.</p> <p>B. Students are assessed only on topics that are in the Standards for Mathematical Content for their grade.</p>	
2. Coherence: The lessons and tasks students encounter reinforce coherence across and within grades.	<i>Note evidence of how this lesson supports or doesn't support the expectations for Coherence:</i>
<p>A. The lessons and tasks students encounter are consistent with the grade level expectations in the Standards.</p> <p>B. The supporting content students encounter reinforces the major work of the grade.</p>	
3. Rigor: Students pursue and progress in conceptual understanding, procedural skill & fluency and application.	<i>Note evidence of how this lesson supports or doesn't support the expectations for Rigor:</i>
<p>A. Students achieve conceptual understanding of key mathematical concepts, where called for in specific content standards or cluster headings.</p> <p>B. Students master all the procedures and reach the fluencies in arithmetic required by the Standards for their grade².</p> <p>C. Students use mathematics in the context of engaging applications.</p>	
4. Student work demonstrates that students meet the content and mathematical practice standards.	<i>Note evidence of how this lesson supports or doesn't support the expectations for student work:</i>
<p>A. Student work shows that students meet the content standards, with particular mastery and rigor in the major work of the grade.</p> <p>B. Students demonstrate – through individual and group work and in whole class discussion – that they apply the standards for mathematical practice in grade-appropriate ways.</p>	

EVIDENT BEYOND THE CLASSROOM

1. The teacher productively collaborates with other teachers to improve practice³.	<i>Note evidence of productive collaboration among teachers:</i>
<p>A. The teacher collaborates with other teachers to find and develop high quality problems and exercises.</p> <p>B. The teacher collaborates with other teachers to review and analyze student work and develop strategies to improve student learning.</p> <p>C. The teacher collaborates with other teachers to observe and evaluate practice based on the shifts.</p>	

¹ Given the particular clusters that are designated major in grade 7, the criterion for that grade is approximately two-thirds, rather than approximately three-fourths.

² Required fluencies chart: <http://tinyurl.com/focusinmath>.

³ Particular emphasis on shared responsibility on the part of school leaders for prioritizing teacher collaboration time.