**GREEN FLAGS AND RED FLAGS FOR IMPLEMENTATION**

**The Common Core State Standards for Mathematics**

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| **GREEN FLAGS:** **We’ll KNOW the CCSS for Math are being implemented when…** | **RED FLAGS:** **We should NOT see the following:** |
| **Focus** |
| * The content of instruction focuses on the identified standards for the grade level, with emphasis placed on the priority standards for the grade level.
* Teachers select text(s) and resources for instruction based on the standards to be taught and assessed.
* Students are challenged to learn the content of mathematics at the level of rigor defined by the CCSS for their grade level.
 | * Students are engaged with topics and activities unrelated to the concepts and procedures identified in the standards for their grade level.
* Content and skills not in the CCSS are taught to “get students ready” for the next grade level or for middle school or high school.
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| **Coherence** |
| * Standards are taught and assessed in ways that maintain their connection to the cluster and domain in which they appear in the CCSS.
* Teachers use understanding of learning progressions presented from grade to grade in the CCSS to monitor students’ progress, to provide scaffolding to support student learning, and to extend learning beyond grade level content, where appropriate.
* Concepts and skills advance and deepen over time, within and across grades.
* Students transfer knowledge and skills across concepts and within and across domains and learning progressions.
* Major topics are linked within grades.
 | * “Crosswalks” of the CCSS are aligned grade by grade with the existing/former state standards.
* Scope and sequence documents or curriculum maps replicate the table of contents of an existing mathematics textbook.
* Standards are “broken apart” for instruction.
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| **Rigor** |
| * In major topics, students pursue the following four aspects of mathematics with equal intensity:

 -- conceptual understanding,  -- procedural skill,  -- fluency, and  -- application. * Students engage in authentic, real-life practice of skills and make use of those skills through extended application of math concepts.
* Students develop deep conceptual understanding of the math concepts identified in the CCSS and are assessed to determine the extent to which they have attained the desired learning.
* Students receive feedback about the concepts and skills they have learned and about their next steps.
 | * Paper and pencil assessments are used predominantly.
* Worksheets and workbooks are used extensively.
* Students are rarely or never assessed formatively.
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| **GREEN FLAGS:** **We’ll KNOW the CCSS for Math are being implemented when…** | **RED FLAGS:** **We should NOT see the following:** |
| **Fluency** |
| * Students are efficient and accurate in performing foundational computational procedures without having to refer to tables and other aids.
* Teachers help students to study algorithms as “general procedures” so they can gain insights to the structure of mathematics (e.g. organization, patterns, predictability)
* Students are able to apply a variety of appropriate procedures *flexibly* as they solve problems.  (Oregon Department of Education, n.d.).
 | * Students regularly and repeatedly refer to tables and aids to assist with computational procedures.
* Students engage in memorization tasks without opportunities to develop deeper understanding of algorithms and when to use them.
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| **Deep Understanding** |
| * Students are given the time to “make sense” of math lessons.
* Students can justify why a particular math statement is true or where a mathematical rule comes from.
* Students are encouraged to use precise and accurate mathematics, academic language, terminology, and concrete or abstract representations (e.g., pictures, symbols, expressions, equations, graphics, models) in the discipline. (Tri-State Collaborative, 2012)
* Students have opportunities to write and speak about their understanding of mathematics content and procedures.
 | * Instruction moves quickly from one topic to another without necessary scaffolding and practice to build deep understanding.
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| **Application** |
| * Students chose the appropriate concept or procedure to solve a problem or analyze a situation without being prompted which to use.
* Opportunities for practice and feedback follow instruction and are provided prior to expecting independent practice by students.
* Teachers support students’ exploration of tasks and lead debriefing discussions in which student reflect on their thinking processes following task completion.
* Students have the necessary confidence to use mathematics effectively in everyday life.
 | * Students are supplied with a problem and directed to the concept or procedure to use to solve the problem.
* Mathematics instruction goes from explanation to independent practice with little or no opportunities for practice and feedback.
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| **Integration** |
| * The standards for mathematical practice are integrated with the teaching of math content standards, particularly those standards that begin with the word “understand.”
* Students have opportunities on a regular basis to engage in mathematical tasks that require them to apply mathematical practices and use mathematical ideas in new situations, including in real life situations.
 | * The Standards for Mathematical Practice are taught as ends in themselves and are not connected to the focus of the content standards identified for the grade level.
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**Resources**

Briars, D. (2011) *Tools and Strategies for Considering Instructional Materials for Implementing the CCSS.* Accessed from <http://www.lsri.uic.edu/ccss/ccss_bo_briars.pdf>.

Carr, J. F. & Harris, D. E. (2001) *Succeeding With Standards: Linking Curriculum, Assessment, and Action Planning*. Alexandria, VA: ASCD.

Common Core State Standards Initiative. (2011) *Common Core State Standards: Mathematics Standards.* Accessed from <http://www.corestandards.org/>

EngageNY (2011) *Instructional Shifts for the Common Core.*  Accessed from <http://engageny.org/wp-content/uploads/2011/08/instructional_shifts.pdf>.

Oregon Department of Education. (n.d.) *CCSS Toolkit: Math Teachers.* Accessed from <http://www.ode.state.or.us/search/page/?id=3426>.

Student Achievement Partners. (n.d.) *Key Instruction Shifts for the Common Core State Standards for Mathematics.* Accessed from http://www.achievethecore.org/downloads/Math%20Shifts%20and%20Major%20Work%20of%20Grade.pdf.

Tri-State Collaborative (Massachusetts, New York, & Rhode Island) facilitated by Achieve with consultation from Student Achievement Partners. (April 12, 2012). *Tri-State Quality Review Rubric for Mathematics Lessons and Units, Version 2.0*. Accessed from http://engageny.org/wp-content/uploads/2012/04/Tri-State-Math-Rubric-V2-04-12-2012.pdf.

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