

# **Response for Pearson's Prentice Hall Middle Grades Mathematics Course 1, 2, 3**

Based on our review of the EdReports evaluations of **Prentice Hall Middle Grades Mathematics**, a comprehensive middle grades mathematics program, we believe that the conclusions of the EdReports evaluation reflect a very narrow interpretation of the goals of the Common Core State Standards for Mathematics (CCSS-M) and fall short of the true intent of the standards.

In evaluating instructional materials, it is important for evaluators, at any level, to keep in mind that standards do not dictate a curriculum, nor do they define learning progressions. In fact, the writers clearly state in the introduction to the CCSS-M that the standards “do not dictate curriculum” (p. 5). The role and purpose of any set of standards is to guide curricula by providing expectations or benchmarks for learning. Further, we believe that these standards, the CCSS-M, should represent “the floor, and not the ceiling” in terms of expectations for student learning so that students are always encouraged to set and reach higher goals and expectations.

An effective curriculum requires a carefully laid-out and thoughtful learning progression that often involves concepts and skills that may not be specifically articulated in the standards, but, without exposure to these concepts and skills, students may not achieve the expected proficiency with certain standards. Again, the writers of the CCSS-M acknowledge the difference between standards and curriculum:

...a teacher might prefer to teach a topic of his or her own choosing that leads, as a byproduct, to students reaching the standards for topics A and B. (CCSS-M, p. 5)

So while everyday curricular experiences may be guided by standards, such experiences should not be limited to the standards. Curricula should offer learning activities that engage students and challenge them to think deeply about concepts and skills while providing adequate time for them to develop understandings and eventually reach and demonstrate proficiency with the standards.

## **A Focused Curriculum**

Although the Grade 6 and Grade 8 courses were evaluated as meeting expectations for the focus criteria (Grade 7 met only one of the two focus criteria), we believe that the process that the reviewers used to evaluate focus compromises the intent of CCSS-M. The notion of grouping lessons into categories (major, supporting, additional) -- groupings that were set by the assessment consortia rather than the writers of the CCSS-M -- with each lesson counting in a single category, only leads to a siloing of content and disregards the horizontal coherence and connections among concepts that are integral to an effective curriculum, and a priority for instructional materials according to the writers of the CCSS-M. This misplaced emphasis on quantifying major work leads to a skewed view of the instructional materials, placing greater importance on individual parts without looking at the whole.

## **A Coherent Curriculum**

*Prentice Hall Middle Grades Mathematics* was designed around a *coherent* organization of content with explicit and embedded connections among concepts both from grade to grade and within the different mathematical domains in each grade. The topics across grades represent a logical vertical progression of concepts and skills. Within a grade level, students encounter and apply key concepts from topic to topic in different areas of mathematics (e.g., measurement, geometry), highlighting the interrelatedness of these concepts, the powerful connections among concepts in different domains.

The EdReports evaluation offers limited insight into the reasons that *Prentice Hall Middle Grades Mathematics* was rated as only partially meeting expectations for coherence. We believe that the arrangement of concepts in a curriculum is not defined by the standards, but by a careful analysis of the multiple factors and variables that are integral to the development of a cohesive and effective curriculum. *Prentice Hall Middle Grades Mathematics* is the product of such thoughtful planning and development.

For example, the EdReports reviewers proposed a sequence of learning experiences for teaching the Pythagorean Theorem before irrational numbers, however, the authors of *Prentice Hall Middle Grades Mathematics* believe a strong counter argument can be made for teaching irrational numbers before the Pythagorean Theorem, helping students make important connections when finding lengths using the Pythagorean Theorem.

## **A Rigorous Curriculum**

The *Prentice Hall Middle Grades Mathematics* instructional model was designed to provide students with a rigorous curriculum, one that helps them develop in-depth understanding of key mathematical concepts, computational or procedural fluency with concepts and skills, and frequent opportunities to apply these concepts in varied contexts. Explicit alignment to the CCSS-M Math Practices is distributed throughout the program. The Examples, Check Your Understanding, Homework and Projects were intentionally created to provide students with a comprehensive and rigorous learning experience.