

## Math Textbook Reviews: Section 1

August 2014

Publisher: McGraw Hill

Textbook Title: Glencoe Math Course 1, 2, 3 and Alt-High Grade 7  
Grade band: 6-8

Focus Metrics	
A. In any grade, materials are designed so teachers and students spend the large majority of their time on the major work of the grade (see Appendix A, page 8), with the majority of major work introduced early in the year.	Yes
B. Topics from future grades are clearly identified as such in the materials and do not detract from focus	Yes
C. Topics from earlier grades are used to support grade-level work. Content from prior grades is clearly indicated as such.	Yes
D. The following topics are not introduced before the appropriate grade level: Gr. 8 - similarity, congruence, or geometric transformations; Gr. 7 - probability; Gr. 6 - statistical distributions and statistical association or trends; Gr. 4 - symmetry of shapes	Yes
Does this textbook meet the requirements for focus?	Yes
Justification/Notes: Glencoe Math is organized into units that correlate to the Common Core Clusters. The units include The Number System; Expressions and Equations; Functions; Geometry; and Statistics and Probability. The units are divided into chapters, and the chapters are divided into lessons. Each lesson has an opening page that explicitly states the Common Core Content Standard as well as Mathematical Practices. Inquiry Labs and Problem-Solving Investigations also explicitly state the Common Core Standard. The program's intent is to spend the large majority of time on the major work of the grade.	

Rigor Metrics	
A. In the major work of the grade, the three aspects of rigor are given full attention: conceptual understanding, procedural fluency, and application.	Yes
B. High quality problems and questions designed to invite exploration and support conceptual understanding are included for content standards and clusters that explicitly call for it. A variety of conceptual problems enable students to connect mathematical ideas and representations, and transfer understandings to new situations.	Yes
C. The development of procedural fluency is robust for those standards that set explicit expectations for fluency. Sometimes problems are purely procedural, and none are based on non-mathematical tricks or mnemonics.	Yes
D. Students are given opportunity to apply mathematical knowledge and skills for standards that set a clear expectation for solving real-world problems.	Yes

A variety of grade-level appropriate problems provide students the opportunity to apply mathematical models in a variety of contextual situations.	
Does this textbook meet the requirements for rigor?	Yes
Justification/Notes: Glencoe Math adequately addresses conceptual understanding, procedural fluency, and application. Essential Questions, Real-World Links, and Examples in each lesson provide conceptual understanding. Inquiry Labs and Problem-Solving Investigations also build conceptual understanding. Procedural fluency is used in Guided Practice, Independent Practice, and Extra Practice in each lesson. Additional opportunities for practice to fluency are given in online digital resources. Application problems are available in each lesson's Higher Order Thinking Problems as well as in each unit's Unit Project. Each chapter includes a focus on a 21 <sup>st</sup> Century Career along with application problems.	

**Were both non-negotiables in Section I met? Yes**

Optional Additional Comments from Reviewers: n/a

### **Math Textbook Reviews: Section 2**

Publisher: McGraw Hill

Textbook Title: Glencoe Math Course 1, 2, 3 and Alt-High Grade 7

Grade band: 6-8

<b>Alignment Metrics</b>	
A. Materials connect the math practices to the content standards in meaningful and intentional ways, preferentially for the major work of the grade. The development of the practices is well-grounded in content and not in isolation.	2
B. Material include teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development. Problems and activities present opportunities for students to make use of and exhibit the practices as they work on content	2
C. Particular attention is given to MP3 - Construct viable arguments and critique the reasoning of others: Students are encouraged to create and test mathematical arguments, make generalizations and provide justifications, particularly in standards that explicitly call for it, in a manner of reasoning appropriate to the grade level.	2
D. Particular attention is given to MP4 - Model with mathematics: Students should be given opportunities to apply mathematics learned in novel situations, with an appropriate tradeoff between the complexity and novelty of the problem and the newness of the content they are asked to use. Modeling problems should draw heavily from major work of the grade level or securely-held content, integrated across multiple domains/clusters where appropriate.	2

<b>Coherence Metrics</b>	
A. Connections are made within a grade between clusters and domains, where these connections are appropriate and natural, as set forth by the Standards (e.g., area models to multiplication in grade 3).	2
B. For materials in a series, grade level progressions reflect the progressions as seen in the Standards, including the development of the practices. These progression connections are clearly indicated in the materials. Any discrepancies in content progressions enhance the required learning in each grade and are clearly aimed at helping students meet the Standards as written.	1

<b>Usability Metrics</b>	
A. Materials support teachers in ways such as the following: planning (including ideas for pacing), introducing lessons, assessment types, vocabulary.	2
B. Materials are clear and easy to read for students, teachers, parents. The design and graphics do not distract from the mathematics.	2
C. Materials include supports for all learners, e.g., EL, students who are below grade level, advanced students.	2

<b>Sensitivity</b>	
Please use the space below to note any concerns about sensitivity with this material.	n/a

