

Math Textbook Reviews:

Section 1, August 2014

Publisher: Triumph

Textbook Title: Tennessee Common Core Coach
Mathematics
Grade band: 3-5

| Focus Metrics | |
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| 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. | No |
| 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? | No |
| Justification/Notes: A. The Fourth Grade Coach Mathematics Coach Book does an outstanding job of making sure the major work of the grade is introduced early in the year. B. In the Common Core Coach Mathematics 4, only fourth grade standards are addressed. C. The Common Core Coach Mathematics 4 does not contain any topics from third grade to support fourth grade level work. D. The appropriate topics on symmetry of shapes, including line symmetry are appropriately introduced at this grade level based upon the standards. | |

| Rigor Metrics | |
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| A. In the major work of the grade, the three aspects of rigor are given full attention: conceptual understanding, procedural fluency, and application. | No |
| 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. | No |
| 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. | No |
| D. Students are given opportunity to apply mathematical knowledge and skills for standards that set a clear expectation for solving real-world problems. A variety of grade-level appropriate problems provide students the opportunity to apply mathematical models in a variety of contextual situations. | No |

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| Does this textbook meet the requirements for rigor? | No |
| <p>Justification/Notes:</p> <p>A. The three aspects of rigor were not given full attention as cited in B, C. and D B. High quality problems and questions are not designed to invite exploration and support conceptual understanding for content standards and clusters that explicitly call for it. Students are not given an opportunity to work with a variety of conceptual problems to connect mathematical ideas and representations. An example of this not being addressed is in lessons 14-17, which addresses standard 4.NF.B.3. Students are only asked four times to explain or justify their reasoning or solutions. C. Procedural fluency is not robust for the third grade standards. It is purely procedural. Fluency is not built throughout the book. It only comes as practice pages included in the teacher's manual that are administered at certain times throughout the year. The questions are all written in one format symbolizing rote learning. D. Students are given very little opportunity to apply mathematical knowledge and skills for standards that set clear expectations for solving real-world problems. Even though it has limited questions based upon real world situations, students are still expected to answer those type questions without providing any type of justification or defending arguments. Students are not asked to apply new learning for solving real-world problems until lesson 14, with only one question. Lesson 22 has two specific questions where students must "apply". Standard 4.NF.B.4 specifically addresses requires students to apply and extend previous understanding of multiplication to multiply a fraction by a whole number. However, in lessons 18 and 19, that address that standard, students are not asked to apply or extend previous learning at all.</p> | |

Were both non-negotiables in Section I met? No

Optional Additional Comments from Reviewers:

| Grade | Comments |
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| 5 | <p>Grade 5 was a "No" for focus section because parts A and C did not align. The section on rigor was a "No" for all parts A-D. Neither section in 1 had the non-negotiables satisfied with "yes". Justification/Notes A. Domain 1 starts off with operations and algebraic thinking, which is additional work of fifth grade. The Vertical Progression guide for common core suggests the correct pathway for learning 5.OA.A.1 and 5.OA.A.2 would be for them to be taught after 5.NBT.A.2 had been introduced. This creates a base for mathematical concepts. Also, Domain 2 is major work of the grade. B. In the Common Core Coach Mathematics 5, only fifth grade standards are addressed C. The Common Core Coach Mathematics 5 does not contain any topics from fourth grade to support fifth grade level work. D. Only fifth grade standards are addressed in Common Core Coach Mathematics 5. Justification/Notes A. The three aspects of rigor were not given full attention as cited in B, C. and D B. High quality problems and questions are not designed to invite exploration and support conceptual understanding for content standards and clusters that explicitly call for it. Students are not given an opportunity to work with a variety of conceptual problems to connect mathematical ideas and representations. An example of this not being addressed is in lessons 1-12 where students have less than 20 questions that require them to explain, justify, and create arguments to defend their solutions. Some lessons have no questions that provide opportunities to support conceptual understanding of</p> |

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| | <p>the standards. C. Procedural fluency is not robust for the fifth grade standards. It is purely procedural. Fluency is not built throughout the book. It only comes as practice pages included in the teacher's manual that are administered at certain times throughout the year. The questions are all written in one format symbolizing rote learning. D. Students are given very little opportunity to apply mathematical knowledge and skills for standards that set clear expectations for solving real-world problems. Even though it has limited questions based upon real world situations, students are still expected to answer those type questions without providing any type of justification or defending arguments. An example of this would be in Domain 3, Numbers and Operations-Fractions which is major work of the grade is found in lessons 19 and 20 that address standard 5.NF.B.7a.b.,c. Students are only expected in four questions to apply mathematical knowledge for solving real-world problems.</p> |
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