The *Big Ideas Math* program was developed around the Common Core State Standards for Mathematics (CCSSM) with the Mathematical Practices as the underlying structure in every section throughout the program. Our curriculum was not written around the methodology that it was tested against for this review. The EdReports evaluation embodies a very narrow view of the CCSSM and their application. EdReports methodology differs from *Big Ideas Math*'s fundamental principles, that standards do not dictate curriculum. *Big Ideas Math* has consistently received high scores from accredited reviewers from across the country.

It is important to note that EdReports did not take into consideration all of the resources in the *Big Ideas Math* program to evaluate each criterion. *Big Ideas Math* includes ancillaries that support all levels of students, from the Skills Review Handbook for students who are struggling to grasp specific concepts, to the Enrichment and Extension worksheets for advanced students. The program also has additional online materials, including but not limited to Differentiating the Lesson, Lesson Tutorial Videos, and the Dynamic Assessment System which provides immediate feedback and remediation. Focus and coherence are met in *Big Ideas Math* by using the entire program. We strive to provide the best resources possible to ensure the required, indepth, strategic learning put forth by the CCSSM.

Throughout the EdReports review of the *Big Ideas Math* series, there are errors and misinterpretations. The EdReports methodology is seen as narrow and unsupported by many respected organizations.

The National Council of Teachers of Mathematics and the National Council of Supervisors of Mathematics have similar concerns about the EdReports results. The following article offers further explanation by these organizations: <u>http://www.nctm.org/News-and-Calendar/News/NCTM-News-Releases/NCTM-Calls-for-Changes-to-EdReports--Reviews-of-Common-Core-Instructional-Materials/</u>

The following is in response to some of the scores received by EdReports based on their criteria.

#### Coherence

<u>Indicator 1a.i</u>: The materials attend to the full intent of the mathematical content contained in the high school standards for all students.

Even though our books cite a standard for a specific section, it is not the only place where that standard is covered. Once a concept is introduced it is used throughout the remainder of the program. *Big Ideas Math* AGA covers all standards for the perspective courses as set forth in Appendix A of the CCSSM.



Taking into consideration that the standards cited in the Student and Teaching Editions are not the only standards covered for a particular section and that sections cited are not the only place that specific standards are covered, the *Big Ideas Math* program meets every expectation for this criterion. The Common Core Standards are covered throughout our program and attend to the full intent of the mathematical content contained in the high school standards for all students.

#### <u>Indicator 1a.ii</u>: The materials attend to the full intent of the modeling process when applied to the modeling standards.

EdReports overlooked some of their own findings in giving *Big Ideas Math* zero out of two points for this criterion. EdReports cited only a few of the places that the content attends to the full intent of the modeling process. We would like to completely disagree with EdReports' conclusion. The EdReports evaluation missed key examples of the modeling standards. Every lesson in the *Big Ideas Math* program incorporates real-life situations into the content and encourages students to use the modeling principles set forth by the Common Core standards.

*Big Ideas Math* was written to accommodate every level of learner. This includes students who need extra prompts and information to meet this standard. *Big Ideas Math* has many examples of modeling throughout the program that are provided to help students understand the modeling process. Many of the Performance Tasks, Examples, and Explorations attend to the full meaning and intent of the modeling process.

#### <u>Indicator 1b.ii</u>: The materials, when used as designed, allow students to fully learn each standard.

Stepped out examples in the Dynamic Classroom and Whiteboard Lessons allow students the opportunity to derive equations, formulas, and proofs with the appropriate level of guidance from their teacher. Having a stepped out example in the textbook also prevents students who miss a class from falling behind by assisting them with the derivation of the equation or formula. The *Big Ideas Math* program strives to fit the needs of every student and does so by providing multiple platforms for teachers and students to use to explore and learn mathematics in a way that makes sense to them individually.

Many of the standards called out by EdReports have a more diverse meaning than what they have interpreted. For example, G.CO.10 does call for students to prove theorems about triangles, however, it does not state that students must do this on their own without guidance from their teachers and/or textbooks. Having a guided proof can be incredibly helpful for students who are struggling to grasp these concepts.



#### <u>Indicator 1c</u>: The materials require students to engage in mathematics at a level of sophistication appropriate to high school.

Using integers throughout the *Big Ideas Math* program is not a downfall. Students should already have the knowledge base to work with decimals and fractions from earlier grade levels. It is not the focus of the Common Core High School Standards to have students work in-depth with complicated numbers. By using integers in many of the examples throughout the textbook, students are able to focus on the new concepts they are learning in a clear and concise way.

It is worth mentioning that many of the resources that accompany the *Big Ideas Math* program are editable. This gives teachers the ability to include more complex questions if they feel the need.

# <u>Indicator 1d</u>: The materials are mathematically coherent and make meaningful connections in a single course and throughout the series, where appropriate and where required by the Standards.

The Scaffolding in the Classroom, Chapter Summaries, Maintaining Mathematical Proficiency, Vocabulary Review, and Section Overviews presented in the Teaching Edition fully outline the connections between content throughout the *Big Ideas Math* series. This includes citing previously learned content and standards by name. The Common Core Progressions at the beginning of every chapter do not cite specific standards, but instead help connect the content in a meaningful way that teachers can easily understand.

Concepts are built upon and connected to new material throughout the *Big Ideas Math* series where appropriate and were required by the standards. This is done in several ways from the Explorations to the Exercises.

### <u>Indicator 1e</u>: The materials explicitly identify and build on knowledge from Grades 6-8 to the High School Standards.

Specific below grade-level standards are referenced in the Teaching Edition. The *Big Ideas Math* series puts the main focus on the important grade-level content more than calling out specific below grade level standards. The Progression Benchmark tests available in the DAS can help teachers identify specific standards that students are struggling with more than citations in a textbook.

The EdReports' citing of Section 1.1 of the Algebra 1 book is completely inaccurate. The standard for 8<sup>th</sup> grade states:

8.EE.7: Solve linear equations in one variable.



While the standards that are cited in the book for high school state:

A.CED.1: Create equations and inequalities in one variable and use them to solve problems.

A.REI.3: Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters.

It is clear that these standards build on one another. It is also important to know that Section 1.1 of Algebra 1 focuses on more than solving linear equations in one variable. It also goes into creating linear equations and using them to solve real-life problems as called for the high school standards. Furthermore, the fact that the students will have prior experience with solving simple equations is mentioned the introduction of the Section 1.1 overview. The EdReports evaluation of this criterion is false and misleading.

## <u>Indicator 1f</u>: The plus (+) standards, when included, are explicitly identified and coherently support the mathematics which all students should study in order to be college and career ready.

In the sections cited by EdReports, the plus standards are included as an extension of the standards and fully compliment the lessons they are included in. *Big Ideas Math* was designed to fit the needs of a wide range of students. The included content that correlates to the plus standards helps challenge and advance students to reach their true potential in the mathematics classroom.

Many of the standards called out by EdReports as being optional should be included in traditional Algebra 2 and Geometry courses as set forth by Appendix A of the CCSSM. The *Big Ideas Math* series follows the guidelines of Appendix A of the CCSSM. A copy of Appendix A is available here: <u>http://www.corestandards.org/Math/</u>.

The examples given above only cover a few of the areas we would like to respond to. If you would like more information about how the *Big Ideas Math* program effectively incorporates the Common Core State Standards and Mathematical Practices into its curriculum or more information about the EdReports methodology, please contact Big Ideas Learning.

