

Review Team Appraisal of Title

(K-8 Mathematics)

This appraisal form is provided for use by educators responsible for the selection of instructional materials for implementation with districts and charter schools across New Mexico to meet the needs of their student populations.

This appraisal form should be used in conjunction with the publisher provided Form D: Research Based Effectiveness Determination that supports this reviewed material which can be found on the Instructional Material Bureau website.

<https://webnew.ped.state.nm.us/bureaus/instructional-materials/the-adoption-cycle/>

| | | | |
|------------|------------------------------------|---------------------|---------------|
| Text Title | CCSS Mathematics 6: Online Student | Publisher | Agile Mind |
| SE ISBN | 9781949175660 | TE ISBN | 9781949175653 |
| SW ISBN | 9781949175936 | Grade Level/Content | Grade 6 |

Core Material Designation *(Core Material is - the comprehensive print or digital educational material, including basal material, which constitutes the necessary instructional components of a full academic course of study in those subjects for which the department has adopted content standards and benchmarks.)*

Recommended Recommended with Reservations Not Recommended

Total Score

| | | | |
|---------------|---------------|---------------|---------------|
| Reviewer #28 | Reviewer #29 | Reviewer #30 | Average Score |
| <u>96.00%</u> | <u>94.83%</u> | <u>91.67%</u> | <u>94.17%</u> |

Standards Review - *Materials are reviewed for alignment with the state adopted content standards, benchmarks and performance standards.*

| | | | |
|---------------|---------------|---------------|---------------|
| Reviewer #28 | Reviewer #29 | Reviewer #30 | Average Score |
| <u>99.26%</u> | <u>99.02%</u> | <u>97.55%</u> | <u>98.61%</u> |

Materials align with grade level standards.

Statements of appraisal and supporting evidence:

Materials meet expectations because all standards have been addressed and materials are aligned to them. The Grade 6 course outlined in this document begins by building on students’ understanding of multiplication and division and equivalent fractions as a basis for understanding ratios and proportional reasoning. Work with positive rational numbers continues as students build fluency with standard algorithms for fraction and multi-digit decimal operations. Formal work with expressions and equations also begins at this level as students use variables to represent relationships and solve problems. Students then extend their understanding of numbers to include negative rational numbers, absolute value as a distance, and coordinates of points in all quadrants of the coordinate plane. Students also extend their understanding of length, area, and volume as they solve problems involving the areas of triangles, special

quadrilaterals, and polygons, and volume of rectangular prisms. Finally, formal work with statistics begins at this grade level in the final two units as students represent data in various ways and build their understanding of statistical variation.

Materials align to standards of mathematical practice.

Statements of appraisal and supporting evidence:

Materials meet expectations of alignment to the standards for mathematical practice. There is a focus throughout the course on mathematical processes and practices and all 8 practices are represented in materials throughout. The publisher stated a belief that in grade 6, students should pay particular attention to precision of language as they begin to formalize ideas from elementary grades. As students begin to work with variables and develop fluency with algorithms and geometry formulas, they have the opportunity to make use of the structure of mathematics and describe regularity in repeated reasoning. This is evidenced in Topic 11: Length and Area using the MARS Task: Flag and in Topic 8: Variables and expressions using constructed response #1 in which students create tables and graphs to represent variable relationships.

Materials show aspects of rigor.

Statements of appraisal and supporting evidence:

Materials show balance in the 3 aspects of rigor: conceptual understanding, procedural skill and fluency, and the application of mathematics. Conceptual understanding is routinely developed in the overview, explore and practice materials using high quality problems, question/discussion and visual and concrete representations as evidenced in Topic 7: Extending the number system (Explore, block 5, pp.7-10) where students are shown a number line within their previous knowledge base and then a series of animations show it extending vertically and then bringing out attributes of the coordinate plane and ending with plotting and identifying points. Procedural skill and fluency is routinely practiced and developed in the guided practice, more practice, and student activity sheets by addressing foundational skills in a variety of ways and opportunities, practice with problems containing a strong conceptual foundation, and explaining solutions for strategy and procedure as evidenced in Topic 1: Operations with whole numbers (SAS block 4 pp.3-7) where students are given a variety of problems that work with simplifying expressions and using order of operations working with whole number exponents. Applications of mathematics is reinforced in more practice, SAS, assessments and tasks by giving a variety of single and multi-step contextual problems that attend thoroughly to the content standards as evidenced in Topic 3: Understanding and representing rates (SAS, block 3, pp. 1-3) where students are working with percentages in a variety of ways.

Math Content Review - Materials are reviewed for relevant criteria pertaining to the support for teachers and students in the specific reviewed content area.

| Reviewer #28 | Reviewer #29 | Reviewer #30 | Average Score |
|---------------|---------------|---------------|---------------|
| <u>92.86%</u> | <u>89.29%</u> | <u>82.14%</u> | <u>88.10%</u> |

Materials are consistent with grade level content, supporting the intent of the delivery and understanding of mathematics.

Statements of appraisal and supporting evidence:

Materials are consistent with grade level content as evidenced with their use of supporting precise and accurate mathematics and academic language (Topic 7: Extending the number line, block 3, page 6). They use concrete and/or abstract representations to support grade appropriate math (Topic 8: Variables and expressions, Explore, block 2, p.2). Structure is provided in supporting arguments and explanations

IM= Instructional Material SE= Student Edition TE= Teacher Edition SW= Student Workbook

(Topic 8: Variables and expressions, SAS, block 8, p. 2) and diagrams and mathematical models (Topic 12: Surface area and volume, Explore, block 1, p.3) to strengthen student learning.

Materials support student learning of mathematics.

Statements of appraisal and supporting evidence:

Materials support learning in mathematics. Explanations of mathematical concepts include examples of more advanced concepts that students will encounter in the future (Advice for Instruction, Professional Learning Essays (video and print) and Developing concept across grade level). Materials are in print and digital form and contain supports that explain the math focus for each lesson and how it relates to the coherence of math learning progressions throughout grade levels. (Prepare Instruction Documents for each topic, Overview for each topic). The materials provide insight into student ways of thinking with respect to important math concepts (Topic 3: Understanding and representing rates, block 3), but not necessarily in a variety of responses. Strategies are provided to elicit mathematical discourse among students (Topic 10: Using equations and inequalities, block 7). It was not evident that the curriculum contained supports or strategies for parents and caregivers to support student progress and achievement.

All Content Review - Materials are reviewed for relevant criteria pertaining to the support for teachers and students in the material regarding the progression of the standards, lesson structure, pacing, assessment, individual learners and cultural relevance.

Reviewer #28

___88.41%___

Reviewer #29

___85.37%___

Reviewer #30

78.66%___

Average Score

___84.15%__

Materials are consistent with the progressions in the standards.

Statements of appraisal and supporting evidence:

The Scope and Sequence document provides coherence between grade levels. For example, 5th grade measurement and data build on in 6th grade with geometry as well as in 7th grade. Evidence is shown with grade-by-grade progressions in Topic 1 (Operation with whole numbers p.1 Blocks 5-7).

Students will be given opportunities to use tables, graphs, verbal descriptions, and investigates with puzzles in Topic 8 Variables and Expressions, prepare instruction (blocks 2-5 p.151-152).

Students will use materials related to prior grade level: diagrams, tables, and coordinate graphs, which is supported in Topic 2 Introducing ratios, prepare instruction, p.23.

Materials are well designed and take into account effective lesson structure and pacing.

Statements of appraisal and supporting evidence:

The design of the material is structured to not be distracting in any way as seen in SAS, Topic 7, Extending the number system (Block 1 p.1-5). The visual design is engaging and uses various content to show conceptual understanding as in SAS, Topic 7, Extending the number system Block 1 p.1-5. It is not distracting but organized with tables, number lines, and pictures. The lesson structure and pacing is an intentional sequence in using real-life mathematical problems as in SAS Topic 4, Equivalent forms: fractions, decimals, percents Block 1. Students use fractions, decimals, and percents in a series of questions that all relate to one another.

Materials support teacher planning, learning, and understanding of the standards.

Statements of appraisal and supporting evidence:

The materials offer teachers strategies to use in the assignments and activities through the use of animation, technology, and real-world and mathematical problems. Materials include learning objectives

that are visibly shaped by the content standards that are seen in the major of the course content and professional support. The materials provide a list of lessons that are engaging to students, support cross-reference standards, and provides a meaningful connection among real-world problems. Materials include problems and/or activities that serve to connect two or more standards in cases where these connections are natural and important. Materials provide strategies for gathering information on students' prior knowledge and across grade levels. The Professional learning section contains explanations of research-based strategies in the lessons. Professional Learning provides opportunities to engage students with important mathematical ideas to deepen their understanding of mathematical concepts. The material offers online and printed supports for teachers through the use of curriculum and instructional resources, how-to videos, webinars and online advice for teachers.

Materials offer teachers resources and tools to collect ongoing data about student progress on the standards.

Statements of appraisal and supporting evidence:

The material asks questions in the beginning of the topics to help students connect their prior knowledge, e.g. "Here are the most common measurement conversion factors. Which of these are familiar to you? Which do you have questions about?"

Students practice fluency for solving equations, fill in the blank to summarize the process for finding a product, look for patterns as they solve other problems, show how they would solve a word problem using a model, and then how they would solve the same problem using numerical computation.

In the Digital version materials, the alignment to standards addresses cross-referencing the standards.

Technology is supported to enhance student learning.

Materials give all students extensive opportunities and support to explore key concepts.

Statements of appraisal and supporting evidence:

The glossary offers clear and concise definitions, includes labeled models or diagrams and examples when appropriate, and is easily accessible in English and Spanish.

The Teacher Guide offers examples of how concepts connect, and suggests what a teacher can say or ask at a given point of the lesson to help students make connections. It explains how the panels (online) help the students meet the objectives, e.g. panels 8-9 encourage students to always check their algebraic rule for different values.

The Teacher Guide offers framing questions, e.g. "Have you ever wondered how far you have traveled on a trip?" as well as supporting questions to ask as students work throughout the lesson, e.g. "Why would a centimeter ruler help us answer this question?"

Materials support effective use of technology to enhance student learning. Digital materials are accessible and available in multiple platforms.

Statements of appraisal and supporting evidence:

All materials are easily accessed, the images load adequately, and the interactive tools and videos play at a normal speed and do not freeze up the computer system.

There are a variety of problems available for students to practice the skills they are learning, including problems where the students are asked to fill in tables or manipulate and interact with graphs.

Each topic offers an automatically scored and a constructed response assessment that can be used in order to assess progress at the end of each topic. Both sections have scoring rubrics at the end.

Materials can be easily customized for individual learners.

Statements of appraisal and supporting evidence:

The topic at a glance gives an overview, suggests materials both paper and electronic, and suggests appropriate specific problems to assign within each block. The digital tool offers a number of problems that the teacher can utilize according to the needs of the students.

The Digital resource allows the teacher to give partial credit and to score test questions that were not scored automatically. Teachers can score tests, quizzes, and assignments, as well as schedule tests and see test results.

Within each topic, students have access to a topic overview, various exploration activities that offer visual and interactive support, a topic summary, and additional practice online activity sheets, which all support the needs of ELL/special needs population, as well as offer the teacher many opportunities to modify lessons accordingly.

Materials take into account cultural perspectives.

Statements of appraisal and supporting evidence:

The materials reflect cultural diversity and multiculturalism mostly in the illustrations, pictures, and names used in the problems. There are limited examples of a sensitivity regarding religion, socioeconomic status, orientations, and views, and limited evidence of the integration and promotion of democratic values within the curriculum. E.g. Topic 2, Block 1, the materials offer an example of different cultures within the illustration, and the scenario involves considering the distance students live from Martin Luther King Jr. Middle School in San Francisco CA. The curriculum reflects an additive approach in that some of the names and illustrations are multicultural.

Reviewer Professional Summation - *These materials are reviewed by Level II and Level III educators from across New Mexico. The reviewers have brought their knowledge, experience and expertise into the review of these materials. They offer here their individual summary of the material as a whole.*

Reviewer #28 background and experience: Reviewer 28 has been teaching for 19 years. She has taught both elementary and middle school. She has also been the math content leader at her school for the last 4 years.

Professional summary of material:

Overall, I see Agile Minds as a qualified curriculum. The curriculum is engaging for students, offers real-world and mathematical problems, supports cross-reference standards, and great resources for both printed and online support for teachers. I would highly recommend this curriculum to district and teachers.

The digital - online version is a great feature for teachers and students. It has components that are engaging to student's learning. All eight mathematical practices have met expectations and are aligned with the standards. The scope and sequence has a significant and smooth flow.

All three aspects of rigor are supported in this curriculum. Conceptual understanding is detailed in all the topics and supported through engaging activities that allow students to relate to real-life math problems that allow students to make connections to the standards. Procedural skill and fluency are addressed by providing activities and opportunities for students to solidify the conceptual understanding through the major of the standards and developing numerical fluency. Students are able to make connections to real-world problems.

The only concerns I have with Agile Minds are the parent support that is offered in the online digital piece and lack of the state connection - the component for culturally and linguistically instruction.

Reviewer #29 background and experience: Reviewer #29 has 11 years of teaching experience in the state of New Mexico and has taught middle school mathematics for 9 years. She has a Master's degree in Curriculum and Instruction with an emphasis in mathematics and leadership. She has worked as a Teacher Leader with NMSU for 8 years, and has been the math content leader at her school for 3 years.

Professional summary of material:

Agile Mind 6th Grade meets the expectations for high quality teaching materials, I was impressed to see the extensive support offered to teachers in the Teacher Guide and Professional Support Online tool. The curriculum places a strong focus on the Standards for Mathematical Practices, as well as on the natural progression for conceptual development. The online panels offer interactive activities that both engage and support all learners, especially the ELL and Special Needs populations, using labeled diagrams and scaffolded learning. The pace seems adequate and manageable, and the suggested materials in each block ensure that the lesson objectives are met.

Overall, I was impressed with the quality of the lessons and their flow. Teachers can expect their students to be engaged with the content, as well as to engage in meaningful discussions. As a teacher, I would be excited to use Agile Mind in my classroom. The curriculum aligns with my vision to create meaningful math opportunities and engage students through the use of technology, problem-solving, and student to student discourse.

Reviewer #30 background and experience: Reviewer #30 has been teaching for 19 years. She is a nationally board certified teacher in the area of early adolescent mathematics and currently teaches at the middle school level. Previous experience has been in the general education department of a community college and at the elementary level but a majority of time has been in middle school.

Professional summary of material:

I feel that the Agile Mind 6th Grade Material solidly Meets Expectations in all areas. I am impressed with the quality of the materials and the development of concepts throughout the year. Students will be engaged and challenged as they explore and practice new ideas and then apply them with rigorous tasks and activities that are often given in the context of real-world problems. Standards are covered thoroughly and in a reasonable sequence. I like the animations and interactive on-line tools and believe they will support student learning. The tools available for the teacher give detailed instruction and ideas for supporting students in many different ways. The provided activity sheets are good reinforcement and practice of skills.

I have some concerns regarding the lack of available parent supports, although there may be more available than I had access to. The curriculum lacked a specific connection to New Mexico and the culture that some students would be able to relate to but was reflective of the overall experiences and culture in the USA.

Overall, this is an excellent, rigorous curriculum filled with a variety of tools and resources and I highly recommend it.

Review Team Appraisal of Title

(K-8 Mathematics)

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| | | | |
|----------|------------------------------------|---------------------|---------------|
| IM Title | CCSS Mathematics 7: Online Student | Publisher | Agile Mind |
| SE ISBN | 9781949175684 | TE ISBN | 9781949175677 |
| SW ISBN | 9781949175950 | Grade Level/Content | Grade 7 |

Core Material Designation (*Core Material is - the comprehensive print or digital educational material, including basal material, which constitutes the necessary instructional components of a full academic course of study in those subjects for which the department has adopted content standards and benchmarks.*)

Recommended Recommended with Reservations Not Recommended

Total Score

| | | | |
|---------------|---------------|---------------|---------------|
| Reviewer #28 | Reviewer #29 | Reviewer #30 | Average Score |
| <u>92.67%</u> | <u>93.50%</u> | <u>93.50%</u> | <u>93.22%</u> |

Standards Review - *Materials are reviewed for alignment with the state adopted content standards, benchmarks and performance standards.*

| | | | |
|---------------|---------------|---------------|---------------|
| Reviewer #28 | Reviewer #29 | Reviewer #30 | Average Score |
| <u>94.95%</u> | <u>96.54%</u> | <u>96.79%</u> | <u>96.09%</u> |

Materials align with grade level standards.

Statements of appraisal and supporting evidence:
 Materials meet expectations because all standards have been addressed and materials are aligned to them. The Grade 7 course outlined in the scope and sequence document builds on Grade 6 work by extending students’ understanding of ratio to a more formal understanding of rate and its application with percents. Students extend their understanding of operations with rational numbers to include negative rational numbers. Students continue the work them in writing expressions and equations, laying the groundwork for their later work in functions. The course then turns to more formal methods for writing and solving multi-step equations and inequalities. Students also build on Grade 6 work with proportional reasoning as they learn to scale 2-dimensional figures and to apply proportional reasoning to probability and statistical situations. Students extend their work with area to include circles and

extend their work with 3-dimensional shapes to include the surface area and volume of the shapes composed of polygons, including the right prisms and pyramids. They investigate the 2-dimensional figures that result from slicing 3-dimensional figures. The course also lays the groundwork for high school geometry as students investigate informal proofs of key geometric relationships among triangles.

Materials align to standards of mathematical practice.

Statements of appraisal and supporting evidence:

Materials meet expectations of alignment to the standards for mathematical practice. There is a focus throughout the course on mathematical processes and practices and all 8 practices are represented in materials throughout. This is evidenced in the document, *Practice Standards Connections*, in the professional supports materials. One example is the MARS Task: Tiling Squares. Students are presented with a task where they use two different colors to have students develop a pattern containing three iterations, and describe how the pattern builds with a partner. The task is designed to provide opportunities for students to build proficiency in the mathematical practices 1: Make sense of problems and persevere in solving them, 3: Construct viable arguments and critique the reasoning of others, 4: Model with mathematics, and 8: Look for and express regularity in repeated reasoning.

Materials show aspects of rigor.

Statements of appraisal and supporting evidence:

Materials show balance in the 3 aspects of rigor: conceptual understanding, procedural skill and fluency, and the application of mathematics. Conceptual understanding is routinely developed in the overview, explore, and practice materials using high quality problems, question/discussion, and visual and concrete representations as evidenced in Topic 8: Equations and inequalities (Explore: Linear expressions and equations, block 4, pp. 1-5) where students work through a series of animated slides for which they find and connect visual representations to create expressions in three different ways. Procedural skill and fluency is routinely practiced and developed in the guided practice, more practice, and student activity sheets by addressing foundational skills in a variety of ways and opportunities, practice with problems containing a strong conceptual foundation, and explaining solutions for strategy and procedure as evidenced in Topic 5: Adding and subtracting integers (SAS block 2 pp.1-7) where students are given a variety of problems that have them practice adding and subtracting integers using modeling strategies. Applications of mathematics is reinforced in more practice, SAS, assessments and tasks by giving a variety of single and multi-step contextual problems that attend thoroughly to the content standards as evidenced in Topic 9: Probability (MART Task: Counters, block 6) where students are asked to calculate theoretical probability and think about how an outcome will be reflected in the results.

Math Content Review - Materials are reviewed for relevant criteria pertaining to the support for teachers and students in the specific reviewed content area.

Reviewer #28

89.29%

Reviewer #29

89.29%

Reviewer #30

89.29%

Average Score

89.29%

Materials are consistent with grade level content, supporting the intent of the delivery and understanding of mathematics.

Statements of appraisal and supporting evidence:

Materials are consistent with grade level content as evidenced with their use of supporting precise and accurate mathematics and academic language (Topic 7: Rational numbers, SAS, block 2, pages 1-2). They use concrete and/or abstract representations to support grade appropriate math (Topic 12: Angles and triangles, Explore, block 2). Structure is provided in supporting arguments and explanations (Topic 3:

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Patterns in proportional relationships, MARS Task: Tiling Squares) and diagrams and mathematical models (Topic 14: Prisms, pyramids, and plane sections, SAS, block 2, p.2) to strengthen student learning.

Materials support student learning of mathematics.

Statements of appraisal and supporting evidence:

Materials support student learning in mathematics. Explanations of mathematical concepts include examples of more advanced concepts that students will encounter in the future (Advice for Instruction, Professional Learning Essays (video and print) and Developing concept across grade level). Materials are in print and digital form and contain supports that explain the math focus for each lesson and how it relates to the coherence of math learning progressions throughout grade levels. (Prepare Instruction Documents for each topic, Overview for each topic). The materials provide insight into student ways of thinking with respect to important math concepts (Topic 10: Representing and interpreting data, explore, deliver instruction, block 1). Strategies are provided to elicit mathematical discourse among students (Topic 9: Probability, explore, deliver instruction, block 6). It was not evident that the curriculum contained supports or strategies for parents and caregivers to support student progress and achievement.

All Content Review - Materials are reviewed for relevant criteria pertaining to the support for teachers and students in the material regarding the progression of the standards, lesson structure, pacing, assessment, individual learners and cultural relevance.

Reviewer #28

87.80%

Reviewer #29

__86.59%__

Reviewer #30

__85.98%__

Average Score

__86.79%__

Materials are consistent with the progressions in the standards.

Statements of appraisal and supporting evidence:

The professional support offers comprehensive scope and sequence. The scope and sequence document offers instructional material, lessons in a consistent flow, and covers the content of each grade. The material offers supporting content that enhances focus and coherence.

The materials are developed according to the grade-by-grade progressions in the standards and provides engaging activities for students to work with at grade-level content.

The scope and sequence relates back to the previous grade working with representing and interpreting data and making connections as seen in Topic 10, representing and interpreting data, prepare instruction, using the numerical measures of central tendency and variability.

Materials foster coherence through connections at a single grade, where appropriate and required by the standards.

Statements of appraisal and supporting evidence:

The materials develop coherence through connecting students through engaging animation activities.

The design of the material using animation is structured so that it is not distracting in any way (Topic 8 equations and inequalities, overview). The visual design is engaging and uses various content to show conceptual understanding (Topic 5 adding and subtraction integers, overview).

Students use intentional sequence in using real-life mathematical problems that are cross-grade curriculum and students are able to make connection of two or more standards.

Each topic has learning objectives that are visible and related to the standards.

Materials are well designed and take into account effective lesson structure and pacing.

Statements of appraisal and supporting evidence:

The materials offer teachers strategies to use in the assignments and activities through the use of animation, technology and real-world and mathematical problems. Materials include learning objectives that are visibly shaped by the content standards that are seen in the majority of the course content and professional support.

The materials provide a list of lessons that are engaging to students, support cross-reference standards, and provide a meaningful connection among real-world problems.

Materials include problems and/or activities that serve to connect two or more standards in cases where these connections are natural and important. Materials provide strategies for gathering information on students' prior knowledge and across grade levels.

The Professional Learning section contains explanations of research-based strategies in the lessons.

Professional Learning provides opportunities to engage students with important mathematical ideas to deepen their understanding of mathematical concepts.

The material offers online and printed supports for teachers through the use of curriculum and instructional resources, how-to videos, webinars and online advice for teachers.

Materials offer teachers resources and tools to collect ongoing data about student progress on the standards.

Statements of appraisal and supporting evidence:

The material asks questions in the beginning of the topics to help students connect their prior knowledge, e.g. "Here are the most common measurement conversion factors. Which of these are familiar to you? Which do you have questions about?"

Students practice fluency for solving equations, fill in the blank to summarize the process for finding a product, look for patterns as they solve other problems, show how they would solve a word problem using a model, and then how they would solve the same problem using numerical computation.

In the digital materials, the alignment to standards addresses cross-referencing the standards.

Technology is supported to enhance student learning. In the digital version, student reporting allows students and teachers to monitor their own progress. Each topic seems to have its own assessments that are both automatically scored and constructed response.

Materials give all students extensive opportunities and support to explore key concepts.

Statements of appraisal and supporting evidence:

The glossary offers clear and concise definitions, includes labeled models or diagrams and examples when appropriate, and is easily accessible in English and Spanish.

The Teacher Guide offers examples of how concepts connect, and suggests what a teacher can say or ask at a given point of the lesson to help students make connections. It explains how the panels (online) help the students meet the objectives, e.g. panels 8-9 encourage students to always check their algebraic rule for different values. The Teacher Guide offers framing questions, e.g. "Have you ever wondered how far you have traveled on a trip?" as well as supporting questions to ask as students work throughout the lesson, e.g. "Why would a centimeter ruler help us answer this question?"

Materials support effective use of technology to enhance student learning. Digital materials are accessible and available in multiple platforms.

Statements of appraisal and supporting evidence:

All material is accessible, the images load adequately, and the interactive tools and videos play at a normal speed and do not freeze up a system. The digital professional support tool offers a good overview of the program, as well as the skills being covered in each topic. Each topic offers an automatically scored and a constructed response assessment that can be used in order to assess progress at the end of each topic. Both sections have scoring rubrics at the end. There are a variety of problems available for the students to practice the skills they are learning or reviewing. The Digital resource allows the teacher to

give partial credit and to score test questions that were not scored automatically. Teachers can score tests, quizzes, and assignments, as well as schedule tests and view the test results.

Materials can be easily customized for individual learners.

Statements of appraisal and supporting evidence:

The materials offer guidance for helping students monitor their progress through the use of panels, identification of the SAS pages that should be used to check student understanding, and identified classroom strategies as well as a description of how to use them to pair up and compare their answers. The materials provide support for ongoing review and practice, with the automatically scored questions that teachers can use to assess student learning, as well as additional practice problems students can use, along with classroom strategies for teachers to formatively assess student progress as they engage in discussions.

Within each topic, students have access to a topic overview, various exploration activities that offer visual and interactive support, a topic summary, and additional practice online activity sheets, which all support the needs of ELL/special needs population, as well as offer teachers many opportunities to modify lessons accordingly. The topic at a glance gives an overview, suggests materials both paper and electronic, and suggests appropriate problems to assign within each block. The online tools also offer a number of problems that the teacher can use according to the needs of the students.

Materials take into account cultural perspectives.

Statements of appraisal and supporting evidence:

Every topic offers a Language Support section in the topic at a glance section, e.g. core vocabulary for the topic is listed, "some non-native speakers may struggle with collateral vocabulary, such as (examples given)...use word wall activities throughout the topic to connect the words to the concepts." The materials offer some support/strategies for culturally responsive pedagogy, e.g. the materials in these sections help students' concepts of operations with rational numbers through the real-life scenario of planning a field trip. The materials illustrate students of different cultures that may be representative of cultural diversity around the country.

The materials reflect diversity and multiculturalism in the illustrations, pictures, and names used in the problem, with some examples of sensitivity regarding religion, socioeconomic status, orientations, and views.

Reviewer Professional Summation - *These materials are reviewed by Level II and Level III educators from across New Mexico. The reviewers have brought their knowledge, experience and expertise into the review of these materials. They offer here their individual summary of the material as a whole.*

Reviewer #28 background and experience:

Reviewer 28 has been teaching for 19 years. She has taught both elementary and middle school. She has also been the math content leader at her school for the last 4 years.

Professional summary of material:

Overall, I see Agile Minds as a qualified curriculum. The curriculum is engaging for students, offers real-world and mathematical problems, supports cross-reference standards, and great resources for both printed and online support for teachers. I would highly recommend this curriculum to district and teachers.

Agile Minds gives several different opportunities for students to be engaged through animation and captivating activities. Agile Minds gives students various ways to record their answers, whether through a student activity sheet, think-pair-share, or group discussion.

Agile Minds focuses on prior knowledge and opportunity to build fluency with standard algorithms. It offers classroom strategies for teachers that emphasizes understanding of reasonableness and computation. Agile Minds uses great visual representations that are not distracting to students but engaging.

The only concerns I have with Agile Minds are the parent support that is offered in the online digital piece and lack of the state connection - the component for culturally and linguistically instruction.

The digital - online version is a great feature for teachers and students. It has components that are engaging to students' learning. All eight mathematical practices have met expectations and are aligned with the standards. The scope and sequence has a significant and smooth flow.

All three aspects of rigor are supported in this curriculum. Conceptual understanding is detailed in all the topics and supported through engaging activities that allow students to relate to real-life math problems that allow students to make connections to the standards. Procedural skill and fluency are addressed by providing activities and opportunities for students to solidify the conceptual understanding through the major of the standards and developing numerical fluency. Students are able to make connections to real-world problems.

Again, I would highly recommend this curriculum to district and teachers.

Reviewer #29 background and experience:

Reviewer #29 has 11 years of teaching experience in the state of New Mexico and has taught middle school mathematics for 9 years, she has a Master's degree in Curriculum and Instruction with an emphasis in mathematics and leadership. She has worked as a Teacher Leader with NMSU for 8 years, and has been the math content leader at her school for 3 years.

Professional summary of material:

Agile Mind 7th grade reflects the standards for high quality teaching materials, the content aligns well with the common core math standards, and the Standards for Math Practices are highlighted effectively throughout the entire materials. The materials offer extensive support in the Teacher Guide, as well as the Professional Support Online tool. While the Student Activity Books provides well-designed activities that meet a balance of rigor, online materials provide more practice and guided support that meet the needs of all learners, especially ELL and Special Needs populations. The pace of the materials seems adequate and manageable, with clearly defined learning objectives that ensure each block hits a target area aligned with the standards.

Overall, I was impressed with the quality of the lessons and their flow. Teachers can expect their students to be engaged with the content, as well as to engage in meaningful and focused discussions. In the State of New Mexico, teachers can expect to use this material to support an additive cultural approach. As a teacher, I would be excited to use Agile Mind in my classroom. The curriculum aligns with my vision to create meaningful math opportunities and engage students through the use of technology, problem-solving, and student to student discourse.

Reviewer #30 background and experience:

Reviewer #30 has been teaching for 19 years. She is a nationally board certified teacher in the area of early adolescent mathematics and currently teaches at the middle school level. Previous experience has been in the general education department of a community college and at the elementary level but a majority of time has been in middle school.

Professional summary of material:

I feel that the Agile Mind 7th Grade Material solidly Meets Expectations in all areas. I am impressed with the quality of the materials and the development of concepts throughout the year. Students will be engaged and challenged as they explore and practice new ideas and then apply them with rigorous tasks and activities that are often given in the context of real-world problems. Standards are covered

thoroughly and in a reasonable sequence and the 8 mathematical practices are interwoven throughout the curriculum. I like the animations and interactive on-line tools and believe they will support student learning. The tools available for the teacher give detailed instruction and ideas for supporting students in many different ways. The provided activity sheets are good reinforcement and practice of skills. The assessment tools are both interactive and give immediate feedback.

I have some concerns regarding the lack of available parent supports, although there may be more available than I had access to. The curriculum lacked a specific connection to New Mexico and the culture that some students would be able to relate to but was reflective of the overall experiences and culture of many students in the USA.

Overall, this is an excellent, rigorous curriculum filled with a variety of tools and resources and I highly recommend it.

Review Team Appraisal of Title

(K-8 Mathematics)

This appraisal form is provided for use by educators responsible for the selection of instructional materials for implementation with districts and charter schools across New Mexico to meet the need of their student populations.

This appraisal form should be used in conjunction with the publisher provided Form D: Research Based Effectiveness Determination that supports this reviewed material which can be found on the Instructional Material Bureau website.

<https://webnew.ped.state.nm.us/bureaus/instructional-materials/the-adoption-cycle/>

| | | | |
|----------|------------------------------------|---------------------|---------------|
| IM Title | CCSS Mathematics 8: Online Student | Publisher | Agile Mind |
| SE ISBN | 9781949175707 | TE ISBN | 9781949175691 |
| SW ISBN | 9781949175974 | Grade Level/Content | Grade 8 |

Core Material Designation *(Core Material is - the comprehensive print or digital educational material, including basal material, which constitutes the necessary instructional components of a full academic course of study in those subjects for which the department has adopted content standards and benchmarks.)*

Recommended Recommended with Reservations Not Recommended

Total Score

| | | | |
|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| Reviewer #28 | Reviewer #29 | Reviewer #30 | Average Score |
| <input type="text" value="95.33%"/> | <input type="text" value="96.83%"/> | <input type="text" value="96.83%"/> | <input type="text" value="96.33%"/> |

Standards Review - *Materials are reviewed for alignment with the state adopted content standards, benchmarks and performance standards.*

| | | | |
|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| Reviewer #28 | Reviewer #29 | Reviewer #30 | Average Score |
| <input type="text" value="98.88%"/> | <input type="text" value="99.71%"/> | <input type="text" value="99.71%"/> | <input type="text" value="99.43%"/> |

Materials align with grade level standards.

Statements of appraisal and supporting evidence:
 Materials meet expectations because all standards have been addressed and materials are aligned to them. The Grade 8 course outlined in the scope and sequence document builds on Grade 7 work with writing and interpreting expressions, solving equations, exploring quantitative relationships between dependent and independent variables, and solving problems involving area, surface area and volume as well as statistical thinking. This course begins with congruence transformations in the coordinate plane, similarity transformations (which is later tied to understanding of slope) and then moves on to linear functions built on previous work with ratios and proportional reasoning. Next is linear functions, equations and systems of equations with a deep understanding of slope. Statistical analysis is used to determine how to represent data using linear models and analysis of frequencies using two-way tables.

IM= Instructional Material SE= Student Edition TE= Teacher Edition SW= Student Workbook

Linear and nonlinear relationships are compared and negative integer exponents and irrational numbers are explored. Understanding of geometric concepts are deepened through investigation and application of the Pythagorean Theorem. Work with surface area and volume is extended to include cylinders, cones and spheres and geometric relationships are explored including parallel lines and triangles.

Materials align to standards for mathematical practice.

Statements of appraisal and supporting evidence:

Materials meet expectations of alignment to the standards for mathematical practice. There is a focus throughout the course on mathematical processes and practices and all 8 practices are represented in materials throughout. This is evidenced in the document *Practice Standards Connections* in the professional support materials. One example is the MARS Task: Vacations. Students are presented with a task where they connect contextual situations with mathematical models, using graphs and algebraic rules. The task provides students the opportunity to build proficiency with these standards for mathematical practices with an emphasis on 1: Make sense of problems and persevere in solving them; 3: Construct viable arguments and critique the reasoning of others; 4: Model with mathematics; and 8: Look for and express regularity in repeated reasoning.

Materials show aspects of rigor.

Statements of appraisal and supporting evidence:

Materials show balance in the 3 aspects of rigor: conceptual understanding, procedural skill and fluency, and the application of mathematics. Conceptual understanding is routinely developed in the overview, explore, and practice materials using high quality problems, question/discussion, and visual and concrete representations as evidenced in Topic 1: Transformation geometry and similarity (Explore: rotations, block 7, page 7), where students work through the animation pages and interactive tools to explore rotations and make inferences about how and what their properties are. Procedural skill and fluency is routinely practiced and developed in the guided practice, more practice, and student activity sheets by addressing foundational skills in a variety of ways and opportunities, practice with problems containing a strong conceptual foundation, and explaining solutions for strategy and procedure as evidenced in Topic 11: Solving linear equations (SAS block 5 pp.7-8, problems 9-12), where students practice solving equations in one variable where there are no solution and infinite solutions. Applications of mathematics is reinforced in more practice, SAS, assessments, and tasks by giving a variety of single and multi-step contextual problems that attend thoroughly to the content standards as evidenced in Topic 4: Pythagorean Theorem (Assessment, Constructed Response, p. 1), where students solve a real-world, multi-step problem about the pitch of a roof in building a house using the Pythagorean Theorem.

Math Content Review - *Materials are reviewed for relevant criteria pertaining to the support for teachers and students in the specific reviewed content area.*

| Reviewer #28 | Reviewer #29 | Reviewer #30 | Average Score |
|--------------|--------------|--------------|---------------|
| __92.86%__ | __89.29%__ | __89.29%__ | __90.48%__ |

Materials are consistent with grade level content, supporting the intent of the delivery and understanding of mathematics.

Statements of appraisal and supporting evidence:

Materials are consistent with grade level content as evidenced by their use of supporting precise and accurate mathematics and academic language. The materials use concrete and/or abstract representations to support grade appropriate math. Structure is provided in supporting arguments,

explanations (Topic 5: Analyzing graphs, MARS Task: graphs), diagrams, and mathematical models to strengthen student learning.

(Topic 5, Analyzing graphs, Exploring, Analyzing this) Topic 5 supports students in their understanding of the conceptual connections between the picture (graph) and numerical values. Students have to make a grade appropriate argument and explanations of their learning that strengthen students' learning.

Materials support student learning of mathematics.

Statements of appraisal and supporting evidence:

Materials support learning in mathematics. Explanations of mathematical concepts include examples of more advanced concepts that students will encounter in the future (Advice for Instruction, Professional Learning Essays (video and print) and Developing concept across grade level). Materials are in print and digital form and contain supports that explain the math focus for each lesson and how it relates to the coherence of math learning progressions throughout grade levels. (Prepare Instruction Documents for each topic, Overview for each topic). The materials provide insight into student ways of thinking with respect to important math concepts (Topic 12 Formulating and solving systems, Deliver Instruction, Lesson Activities). Strategies are provided to elicit mathematical discourse among students (Topic 13 Other methods for solving systems, Deliver Instruction, Exploring "Substitution method"). It was not evident that the curriculum contained supports or strategies for parents and caregivers to support student progress and achievement.

All Content Review - Materials are reviewed for relevant criteria pertaining to the support for teachers and students in the material regarding the progression of the standards, lesson structure, pacing, assessment, individual learners and cultural relevance.

Reviewer #28

87.20%

Reviewer #29

90.85%

Reviewer #30

90.85%

Average Score

89.63%

Materials are consistent with the progressions in the standards.

Statements of appraisal and supporting evidence:

The professional support offers a comprehensive scope and sequence. The scope and sequence document offers instructional material, lessons in a consistent flow, and covers the content of each grade. The material offers supporting content that enhances focus and coherence.

The materials are developed according to the grade-by-grade progressions in the standards and provides engaging activities for students to work with at grade-level content.

The scope and sequence relates back to the previous grade working with representing and interpreting data and making connections as seen in Topic 14, exploring geometric relationships, prepare instruction, using the numerical measures of central tendency and variability.

Materials foster coherence through connections at a single grade, where appropriate and required by the standards.

Statements of appraisal and supporting evidence:

The materials develop coherence through connecting students through engaging animation activities.

The design of the material using animation is structured so that it is not distracting in any way (Topic 15 Cylinders, cones, spheres, Overview). The visual design is engaging and uses various content to show conceptual understanding (Topic 6, Exploring rate of change in motion problems, Overview).

Students use intentional sequence in using real-life mathematical problems that are cross-grade curriculum and students are able to make connection of two or more standards.

| |
|---|
| Each topic has learning objectives that are visible and related to the standards. |
| Materials are well designed and take into account effective lesson structure and pacing. |
| <p><i>Statements of appraisal and supporting evidence:</i></p> <p>The materials offer teachers strategies to use in the assignments and activities through the use of animation, technology, and real-world and mathematical problems. Materials include learning objectives that are visibly shaped by the content standards that are seen in the majority of the course content and professional support.</p> <p>The materials provide a list of lessons that are engaging to students, support cross-reference standards, and provide a meaningful connection among real-world problems.</p> <p>Materials include problems and/or activities that serve to connect two or more standards in cases where these connections are natural and important. Materials provide strategies for gathering information on students' prior knowledge and across grade levels.</p> <p>The Professional Learning section contains explanations of research-based strategies in the lessons. Professional Learning provides opportunities to engage students with important mathematical ideas to deepen their understanding of mathematical concepts.</p> <p>The material offers online and printed supports for teachers through the use of curriculum and instructional resources, how-to videos, webinars and online advice for teachers.</p> |
| Materials offer teachers resources and tools to collect ongoing data about student progress on the standards. |
| <p><i>Statements of appraisal and supporting evidence:</i></p> <p>The material asks questions in the beginning of the topics to help students connect their prior knowledge, e.g. "How is this situation similar to others we have investigated in this unit? What different transformations have we studied?"</p> <p>Students practice fluency for solving equations, fill in the blanks to summarize the process for finding a product, look for patterns as they solve other problems, show how they would solve a word problem using a model, and then how they would solve the same problem using numerical computation.</p> <p>In the digital materials, the alignment to standards addresses cross-referencing the standards.</p> <p>Technology is supported to enhance student learning.</p> <p>In the digital version, student reporting allows students and teachers to monitor their own progress. Each topic seems to have its own assessments that are both automatically scored and constructed response.</p> |
| Materials give all students extensive opportunities and support to explore key concepts. |
| <p><i>Statements of appraisal and supporting evidence:</i></p> <p>The glossary offers clear and concise definitions, includes labeled models or diagrams and examples when appropriate, and is easily accessible in English and Spanish.</p> <p>The Teacher Guide offers examples of how concepts connect, and suggests what a teacher can say or ask at a given point of the lesson to help students make connections. It explains how the panels (online) help the students meet the objectives, e.g. panels 6 encourage students to build on students' work with rates in the previous topic and deepen their understanding of this central concept.</p> <p>The Teacher Guide offers framing questions, e.g. "What are some other examples of transformations in this classroom? In your home? In nature?" as well as supporting questions to ask as students work throughout the lesson, e.g. "What is the difference between a dilation and the other three transformations (reflections, rotations, and translations)?"</p> |
| Materials support effective use of technology to enhance student learning. Digital materials are accessible and available in multiple platforms. |
| <i>Statements of appraisal and supporting evidence:</i> |

Digital materials are compatible with multiple internet browsers; they can be accessed through various devices such as laptops, desk tops, and tablets. The publisher stated the materials will be accessible through a mobile device for the 2019-2020 school year. The materials were accessible; images and videos loaded and played at a normal speed and did not freeze the computer system. Teachers can select from a variety of tasks in each topic. The tasks are multiple choice or questions where students are asked to select all the correct answers, and the teacher is able to view the scores immediately. There are a variety of problems available for students to practice procedural fluency using technology. The My Agile online tool allows the teacher to grade questions and give full or partial credit, as well as to score test items for the constructed response questions. Teachers can score tests, quizzes, and assignments, as well as schedule tests and view test results. The materials provide essays that support teachers by covering important math concepts in a deep way. Teachers have access to tech support through the website.

Materials can be easily customized for individual learners.

Statements of appraisal and supporting evidence:

The My Agile online tool allows the teacher to grade questions and give full or partial credit, as well as to score test items for the constructed response questions. Teachers can score tests, quizzes, and assignments, as well as schedule tests and view test results. The topic at a glance gives an overview, suggests materials both from the SAS and electronic, and suggests appropriate problems to assign within each block. The online tool offers a number of problems that the teacher can use to accommodate the needs of the students. The materials offer various strategies and language support, as well as moves to model concepts. For example—Support for ELL/other special populations: topic contains many visualizations and interactive animations that help students connect rate of change to motion.

Materials take into account cultural perspectives.

Statements of appraisal and supporting evidence:

The materials ensure the best instructional practices for inclusive and student centered instructional approaches, each block has support for ELL/other special populations strategies. Materials provide support and encouragement for teachers to draw upon home language to facilitate learning, e.g. think carefully about how you pair students for the word wall game. You may choose to pair two ELL students with the same language background together so that they can help each other make sense of all of the new vocabulary. Or, you may intentionally pair a native speaker with an ELL student so that the native speaker can clarify any language issues in a one-on-one setting.

The materials follow an additive cultural teaching approach. The materials provide diverse cultural perspectives. The TE offers support for ELL learners and provides strategies to scaffold the learning for these students.

The materials provide examples of different cultures, and locations in the nation, such as a map of Austin, TX and surrounding cities. However, these examples do not reflect the lived experiences, different cultures, and languages of New Mexico.

The materials provide ample examples that represent different cultures, illustrations, photos, and charts that reflect multicultural diversity of the nation.

Reviewer Professional Summation - *These materials are reviewed by Level II and Level III educators from across New Mexico. The reviewers have brought their knowledge, experience and expertise into the review of these materials. They offer here their individual summary of the material as a whole.*

Reviewer #28 background and experience: Reviewer 28 has been teaching for 19 years. She has taught both elementary and middle school. She has also been the math content leader at her school for the last 4 years.

Professional summary of material:

Overall, I see Agile Mind as a qualified curriculum. The curriculum is engaging for students, offers real-world and mathematical problems, supports cross-reference standards, and great resources for both printed and online support for teachers. I would highly recommend this curriculum to district and teachers.

Agile Mind gives several different opportunities for students to be engaged through animation and captivating activities. Agile Minds gives students various ways to record their answers, whether through a student activity sheet, think-pair-share, or group discussion.

Agile Mind focuses on prior knowledge and opportunity to build fluency with standard algorithms. It offers classroom strategies for teachers that emphasize understanding of reasonableness and computation. Agile Mind uses great visual representations that are not distracting to students but engaging.

The only concern I have with Agile Mind are the parent support that is offered in the online digital piece and lack of the state connection - the component for culturally and linguistically instruction.

The digital - online version is a great feature for teachers and students. It has components that are engaging to students' learning. All eight mathematical practices meet expectations and are aligned with the standards. The scope and sequence has a significant and smooth flow.

All three aspects of rigor are supported in this curriculum. Conceptual understanding is detailed in all the topics and supported through engaging activities that allow students to relate to real-life math problems that allow students to make connections to the standards. Procedural skill and fluency are addressed by providing activities and opportunities for students to solidify the conceptual understanding through the major work of the standards and developing numerical fluency. Students are able to make connections to real-world problems.

Again, I would highly recommend this curriculum to district and teachers.

Reviewer #29 background and experience: Reviewer #29 has 11 years of teaching experience in the state of New Mexico and has taught middle school mathematics for 9 years. She has a Master's degree in Curriculum and Instruction with an emphasis in mathematics and leadership. She has worked as a Teacher Leader with NMSU for 8 years, and has been the math content leader at her school for 3 years.

Professional summary of material:

The 8th grade Agile Mind materials and curriculum meet the expectations for high quality teaching materials. One of the biggest strengths for the teacher materials is that they provide insight into student ways of thinking. The materials offer examples of important math concepts and possible student responses and/or misconceptions in every topic and every block. The materials offer many strategies to elicit student responses and student-to student discourse. I was impressed to see the extensive support offered in the Teacher Guide and Professional Support Online tool.

The curriculum places a strong focus on the Standards for Mathematical Practices, as well as the natural progression for conceptual development. The materials use real-world and authentic examples, which offer support and helps students make important connections. Another highlight is the professional interactive essays that help teachers dive deep into mathematical concepts that go beyond what they are teaching. The online panels offer interactive activities that both engage and support all learners, especially ELL and Special Needs populations, using labeled diagrams and scaffolded learning.

The materials offer an additive cultural approach, and the visuals appeal to multicultural populations. Overall I was impressed with the quality of the lessons and their flow. As a teacher, I would be excited to use Agile Mind in my classroom, as the curriculum aligns with my vision to create meaningful math

opportunities and enhance student engagement through the use of technology, problem-solving, and student discourse.

Reviewer #30 background and experience: Reviewer #30 has been teaching for 19 years. She is a nationally board certified teacher in the area of early adolescent mathematics and currently teaches at the middle school level. Previous experience has been in the general education department of a community college and at the elementary level but a majority of time has been in middle school.

Professional summary of material:

I feel that the Agile Mind 8th Grade Material solidly Meets Expectations in all areas. I have spent a majority of my time as an 8th grade math teacher and I would love to use this curriculum in my classroom. I am impressed with the quality of the materials and the development of concepts throughout the year. Students will be engaged and challenged as they explore and practice new ideas and then apply them with rigorous tasks and activities that are often given in the context of real-world problems. Standards are covered thoroughly and in a reasonable sequence and the 8 mathematical practices are interwoven throughout the curriculum. I like the animations and interactive on-line tools and believe they will support student learning. The tools available for the teacher gives detailed instruction and ideas for supporting students in many different ways. The provided activity sheets are good reinforcement and practice of skills. The assessment tools are both interactive and give immediate feedback.

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Overall, this is an excellent, rigorous curriculum filled with a variety of tools and resources and I highly recommend it.