2019 Instructional Material Summer Review Institute

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/

IM Title	Imagine Learning Illustrative	Publisher	Imagine Learning LLC	
	Mathematics Curriculum Grade 3			
	(Digital Only) 1 year			
SE ISBN	9798885224093	TE ISBN	9798885224109	
SW ISBN	9798885224116	Grade	Grade 3 Mathematics	
		Level/Content		

<u>Core Material Designation</u> (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 <u>X</u>	Recommended with Reso	ervations	Not Recommended
Total Score			
Reviewer #1 <u>93%</u>	Reviewer #2 <u>95%</u>	Reviewer #3 <u>91%</u>	Average <u>93%</u>

<u>Standards Review</u> - Materials are reviewed for alignment with the state adopted content standards, benchmarks and performance standards.

Reviewer #1 <u>94%</u> Reviewer #2 <u>97%</u> Reviewer #3 <u>89%</u> Average <u>93%</u>

Materials align with grade level standards.

Statements of appraisal and supporting evidence:

Illustrative Mathematics aligns with all 3rd grade level standards when units are approached as a whole. When approaching the material as individual lessons, standards are not fully addressed but as the units are approached as a whole, standards are completely addressed. There are several lessons that activate prior learning from previous grade levels as well as extend student learning to prepare for future content. Each lesson and unit outlines the standards that are focused on and assessed. The scope and sequence lists all standards as they are addressed throughout the material.

Materials align to standards for mathematical practice.

Statements of appraisal and supporting evidence:

The material successfully addresses all 8 standards for mathematical practice through everyday lessons as well as optional center activities. Some standards for mathematical practice are more of a focus throughout the material. Standards for mathematical practice that are addressed in each lesson are listed at the beginning of each lesson.

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

An explanation of how students use each math practice standard is included throughout each lesson in the teaching notes.

Materials show aspects of rigor.

Statements of appraisal and supporting evidence:

Lessons are balanced when considering each of the aspects of rigor. The lesson warm ups offer fluency practice as well as activate prior learning to get students ready for the content of the lesson. The activities progress throughout each lesson, with the first activity focusing on developing conceptual understanding and the following activities focusing on application and fluency. The material offers supplemental materials, including games and activities, which support students' fluency and reinforce their conceptual understanding. Lessons at the end of each section focus on application of skills that have been developed throughout the preceding lessons, which brings together the fluency and concept development from prior lessons.

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

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

Statements of appraisal and supporting evidence:

Each lesson is structured to include a warm up, activities, lesson synthesis and a cool down in order to ensure successful content delivery and to better support the development of student understanding. Teaching notes are included throughout each lesson to guide and support teachers in delivering the content. Teaching notes also point out specific things to include in the synthesis to ensure that all strategies have been discussed. The lessons focus on student discourse throughout the activities as well as the synthesis, which encourages student engagement and investment in learning. The material also includes family support materials, including videos and sample problems, which support student understanding of the concepts.

Materials support student learning of mathematics.

Statements of appraisal and supporting evidence:

Student learning is supported through the large amount of discourse that is included in each lesson. Discussions focus on student reasoning as well as strategies of peers in both whole group and small group discussions. While the material includes guiding questions for the teacher to guide instruction, details about identifying and addressing student misconceptions can be vague. Most of the learning is student led and takes place through partner and small group learning. The teacher must be attentive and engaged in student learning in order to successfully facilitate student learning.

<u>All Content Review</u> - 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.

Materials are consistent with the progressions in the standards.

Statements of appraisal and supporting evidence:

The materials present grade level content with coherence. The content progresses naturally to include learning from prior grades, developing the necessary understandings for the current grade and preparing students for future learning. Each unit contains a balance of fluency, conceptual development and application of the grade level standards. The scope and sequence shows all the third grade standards broken into 8 units and a total of 144

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lessons, which can be completed in one school year. Each lesson includes suggested time frames for instruction. Students are engaged in learning with the virtual manipulatives that are included in the material. Optional lessons are included in each unit that extend the learning.

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

Statements of appraisal and supporting evidence:

Each unit and lesson outlines the standards that are focused on at the beginning of the unit/lesson as well as throughout each unit/lesson. Learning goals are included, which give students an understanding of the standards being taught in each lesson. Many lessons connect multiple standards to enhance the understanding and application of skills.

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

Statements of appraisal and supporting evidence:

Each lesson is structured to include a warm up, activities, lesson synthesis and a cool down in order to ensure successful content delivery and to better support the development of student understanding. The material offers a variety of resources to support teacher understanding, including videos and teaching notes in each unit.

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

Statements of appraisal and supporting evidence:

The material includes a pacing guide, annotations and detailed explanations of routines/strategies to support teachers. Each lesson includes a formative assessment and each section and unit include a summative assessment. At the end of each lesson, the material includes suggestions for the teacher to use the following day to address misconceptions students may have had. Monitoring forms are included for the teacher to keep track of student progress. Student journal prompts allow students to reflect on their own learning and progress. Online assessments include guidance for online scoring and connect each question to standards for grading.

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

Statements of appraisal and supporting evidence:

The material includes scaffolds and strategies for a range of learners. Live Learn for online learning, exploration problems, and virtual manipulatives are available in each lesson to differentiate learning for a variety of learners. An adaptation pack includes intervention resources that connect to prior learning with links to previous lessons and activities, which can be used for intervention. Units and lessons include opportunities for students to investigate content beyond what is expected through the exploration problems.

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

Statements of appraisal and supporting evidence:

Each lesson can be taught virtually through the Live Learn option. Virtual assignments and assessments can be modified to meet the needs of individual learners or classes. Virtual lessons can be individually paced or taught as a whole group. All digital materials are accessible on multiple platforms.

Materials can be easily customized for individual learners.

Statements of appraisal and supporting evidence:

All materials are easily customized to meet individual learning needs. Center activities can be customized to be used as whole group activities if needed. Virtual assignments and assessments can be modified to meet the needs of individual learners or classes. Virtual lessons can be individually paced or taught as a whole group. When using Live Learn, students have the option to verbally record their answers and teachers have the opportunity to annotate on their screen.

Materials take into account cultural perspectives.

Statements of appraisal and supporting evidence:

Materials represent a variety of cultural backgrounds. Student diversity is a focus of many of the instructional routines, which are implemented to promote student discourse. The topics and questions that are discussed are relevant to New Mexico students. Many topics are left open ended in order to encourage students to connect with the content and to bring in multiple world perspectives.

<u>**Reviewer Professional Summation**</u> - 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 #97 background and experience: I am a level 3 teacher with 15 years of teaching experience. I am dual certified to teach special education K-12 and general education K-8 and am ELD certified. I have worked at the elementary level for all 15 years.

Professional summary of material:

Illustrative Mathematics offers a well rounded approach to teaching all of the 3rd grade math standards. It is logically sequenced and incorporates a variety of strategies and approaches to the standards. Each unit is well organized to present concept development that progresses from tactile, hands-on learning to more abstract application of concepts. Students are given multiple opportunities to develop fluency through the center activities as well as the warm up activities in each lesson. Formative and summative assessments are included at the end of each lesson, section, and unit to drive instruction. Extension and intervention activities are incorporated throughout each unit and lesson. Teachers and families are supported throughout the entire material through explanatory videos and examples to better support student learning. The material incorporates technology into every lesson, making a seamless transition to virtual learning for teachers and students. Overall, Illustrative Mathematics is an easy to follow material that is student driven and incorporates all aspects of rigor as well as standards for mathematical practice to ensure the success of all learners.

Reviewer #98 background and experience: I am a level III teacher with 21 years of teaching experience, 11 years as a fifth grade teacher and 10 years as a sixth grade math teacher.

Professional summary of material:

This material is strategically written and organized to allow students to develop a conceptual understanding of the standards through engaging activities that include a variety of physical and virtual manipulatives and diagrams, as well as sufficient opportunities to practice, develop fluency, and apply the concepts to both mathematical and real-world problems. The structure of each lesson supports learners of all ability levels with a warm-up, learning activities, synthesis, and cool-down that use student discourse to guide the instruction. The teacher acts as a facilitator to lead discussions that allows students to share their solutions, strategies, and explanations. There are numerous supports for teachers to successfully guide students in their learning. Overall, the lessons, learning activities, and assessments show very strong alignment with the standards and progress in an effective sequence, explaining connections to prior knowledge and content. The Mathematical Practices and Aspects of Rigor are interwoven throughout all units and all content standards.

Reviewer # 99 background and experience: I am a level 3 teacher with 23 years of experience, 17 years as a 7th and 8th grade teacher, 5 years as a 6-8 Instructional Coach, and 1 year teaching Algebra 1 and Algebra 2. I hold a Master's in Curriculum and Instruction with an emphasis in TESOL.

Professional summary of material:

The Illustrative Math material for Grade 3 provides a consistent format of lessons that supports instruction through a Launch, Explore, Summarize format. Every lesson is designed to allow all learners entry points, provides multiple modes of teaching and learning from hands-on to abstract, and provides multiple opportunities and modes for building conceptual understanding, procedural and skill fluency, and application. There is a progressive flow to the learning throughout and amongst units that addresses prior learning and prepares students for future learning. The lessons provide opportunities to revisit skills and concepts to help with retention of learning and incorporate multiple modes of formative and summative assessments. All Standards for Mathematical Practice are embedded throughout and named in the lessons. Each lesson includes suggested instructional strategies, which are clearly defined for teacher support and which create a rich learning environment that promotes math discourse. There are various supports included for teachers, ELs, students with disabilities, and families.

Common errors and misconceptions are alluded to in lesson overviews and teacher notes, but are not explicitly named. Notes mention what to do if students do not give expected responses, but identifying what misconceptions and errors to look for and how to address them is not explicitly stated.

Overall the material strongly aligns with grade level standards and SMPs, includes all aspects of rigor, provides multiple paper and virtual supports and materials for teachers and students, and supports the holistic development of students' math knowledge.