#### **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 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 | Pathways 2 Career Grade 8 | Publisher              | NS4ED         |
|----------|---------------------------|------------------------|---------------|
| SE ISBN  | 2050000720060             | TE ISBN                | 2051000720060 |
| SW ISBN  | N/A                       | Grade<br>Level/Content | Grade 8       |

| •              | es the necessary instruction<br>ted content standards and |                | mic course of study in those subjects for which |
|----------------|---|----------------|---|
| Recommended _X | Recommended with  | n Reservations | Not Recommended                                 |
| Total Score    |   |                |   |
| Reviewer #64   | Reviewer #65  | Reviewer #66   | Average Score                                   |
| 87.7%          | 92.1%   | 92.6%          | 90.83%  |

Core Material Designation (Core Material is - the comprehensive print or digital educational material, including basal

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

Reviewer #64 Reviewer #65 Reviewer #66 Average Score

<u>88.1%</u> <u>91.4%</u> <u>93.3%</u> <u>91%</u>

# Materials align with grade level standards.

Statements of appraisal and supporting evidence:

Most standards are well represented and have problems that are procedural, conceptual, and application-based. Questions flow in a logical order to build fluency with the standards and mathematics content. Conceptual understanding is not as clear compared to how the materials emphasize procedural skill, fluency and applying the standards. Some of the geometry skills need additional support from the teacher to foster understanding of the standards. Geometry standards are present, but they are not as evident as the other standards.

## Materials align to standards for mathematical practice.

Statements of appraisal and supporting evidence:

All seven Mathematical Practices are represented within the materials. The questioning types used to incorporate the Mathematical Practices are varied and engaging.

## Materials show aspects of rigor.

Statements of appraisal and supporting evidence:

The three aspects of rigor are not always treated together and are not always treated separately. There is a balance of the three aspects of rigor in the grade. Evidence of rigor is present through all of the units throughout each quarter.

<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.

Reviewer #64 Reviewer #65 Reviewer #66 Average Score

<u>96.4%</u> <u>100%</u> <u>92.9%</u> <u>96%</u>

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

Statements of appraisal and supporting evidence:

The materials present the content with clarity. The delivery flows well from lesson to lesson and consistently engages students with the content. There is evidence of building on previous knowledge and teaching the standard to a level that will prepare students for future mathematics courses.

### Materials support student learning of mathematics.

Statements of appraisal and supporting evidence:

Students are responsible for working with all standards in a variety of ways, including applying the standards to real-world problems. Students are assessed for growth in major content areas in a way that allows the teacher to monitor student growth and help them master the materials. Teachers can also differentiate student learning within the materials by adding content to each individual student as needed and providing feedback within the materials.

<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.

Reviewer #64 Reviewer #65 Reviewer #66 Average Score

<u>85.4%</u> <u>92.7%</u> <u>90.9%</u> <u>90%</u>

# Materials are consistent with the progressions in the standards.

Statements of appraisal and supporting evidence:

Students spend a majority of their class time working for mastery of the standards as the standards progress in difficulty and depth of understanding. The materials provide multiple opportunities for students to learn the standards. All of the standards are covered in such a fashion that mastery does not require mastery of every lesson because there is spiraled review built in throughout.

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

Statements of appraisal and supporting evidence:

Within the materials, there are references to past learning of standards. For example, when students are learning about exponential functions, there is a call back to linear functions to remember key information that defines a linear function. These moments of activating prior knowledge are present throughout the materials and engage students to access prior knowledge to build upon the standards within their grade level.

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

Statements of appraisal and supporting evidence:

Materials are neat, not cluttered, and have clear labels for each section. All lessons have the same basic structure, which allows for routine-building and teachers to effectively plan lessons. The pacing guide is structured so teachers can individualize the lessons without sacrificing time to sections of the materials. The pacing guide outlines the amount of days spent on learning, which can vary from 120-180 days.

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

Statements of appraisal and supporting evidence:

The materials have an embedded system to evaluate student data. Assessments provided give a Quantile score, which includes measures for pre-requisite, supporting, and upcoming skills. The system allows teachers to monitor student growth and knowledge of the content.

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

Statements of appraisal and supporting evidence:

Materials support CLRT, learning for ELL students, and students with different learning styles. Resources and collaboration opportunities are embedded within the TE. The students also have access to the exploration of career paths that have been included in the materials. They give students opportunities to further explore careers that they are learning about within each lesson.

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:

The materials provide a parent flier that outlines what parents/caregivers can do to help students at home and the availability of the materials on all platforms and devices. Students can use a calculator and graphing programs to help them complete the work, all of which are available online.

# Materials can be easily customized for individual learners.

Statements of appraisal and supporting evidence:

Teachers have the ability to individually assign students additional work and submit feedback to them individually.

# Materials take into account cultural perspectives.

Statements of appraisal and supporting evidence:

The pictures embedded throughout the lessons show people from different backgrounds, especially within the career exploration, career story, and step into the career sections. Student discussion is encouraged and students are given tools to have culturally respectful conversations within the classroom. There are no specific references to culture within the materials.

<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 #64 background and experience:

I am a high school math teacher with 10 years of high school math experience, including work as PLC leader of 3 content areas and with my district's CCSS transition team. This is my third time reviewing instructional materials for the NM PED.

# Professional summary of material:

This title offers a wide range of lessons that adequately address conceptual understanding, procedural fluency, and application of mathematical concepts. There is attention to rigor and all of the mathematical practices are represented. If students and teachers truly engage with the platform, the chance to attach the mathematical skills being taught and learned in the classroom to concrete life skills and careers will prove invaluable to current and future student engagement and success in mathematics. There is a wide range of life experiences featured and attention to the diversity of New Mexico is reflected.

The lessons are all organized similarly to allow for routine-building and they are also customizable so teachers can differentiate for the diverse learners in their classrooms. There is flexibility in assigning content online or as PDFs/printing PDFs, allowing for grading in the system itself or by hand/with comments via an LMS. The lessons have examples followed by targeted small group/pair/independent work. Each lesson includes a student edition and a teacher edition. Three assessments are provided online—one as a diagnostic, one as a midterm/winter EOC, and one as a final/spring EOC.

## Reviewer #65 background and experience:

I have been in education for 22 years, teaching math and special education. I teach AP math and Computer Science. I have served as a curriculum coordinator in my district and Math team leader. I have reviewed instructional material for the NMPED three times.

#### Professional summary of material:

This material is designed to support career readiness and provide a clear insight into regional, high-value career opportunities. It is aligned to the CCSS and aims to engage students' learning processes through application and problems. All Math Practices are represented throughout the lessons and address a high level of rigor. Diversity in education is addressed, creating relatability to New Mexico students.

Lessons are scaffolded and built upon a guide from K-12. The standards are intentional and strategically designed in a way that ensures natural progression and cohesion between previous math learning as well as between the lessons. The intent and structure of each of these lesson types are consistently maintained throughout the course. The material provides students with a foundation, as well as motivation, for successfully using mathematics.

#### Reviewer #66 background and experience:

I have been a mathematics teacher for 7 years at an alternative high school and have a Master's in Secondary Education, emphasis in Educational Technology. I have been a Reviewer of Record twice for the NMPED.

#### Professional summary of material:

The materials are structured very logically and the layout is clear and free from distractions. While reviewing the materials, the addition of career exploration by students was engaging for me as a teacher. Giving students examples of where the mathematics they are learning fit within a career is powerful for

them to see and engage with. The structure of the materials is straightforward and flows systematically. All of the Mathematical Practices are included, along with the CCSS. The lessons circle back to the standard frequently and make sure that students receive depth of knowledge within the materials.

The materials are all digital, and no textbooks or Teacher Editions in print are available. There are places within the materials that additional content can be introduced. The Teacher Edition provides many opportunities for mathematical discourse to happen and guidance on how to facilitate the conversations. The materials also provide teachers with information about past and future learning to ensure that the learning within the materials is connected to other courses. Overall, this material is successful in bringing mathematics into real-world scenarios for students to relate to and engage with.