2024 Instructional Material Summer Review Institute

Review Team Appraisal of Title

Third Grade Science

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.

NMPED Adoption Information

Text Title	Inspire Science, New Mexico Grade 3, Comprehensive Student Bundle, 6 Year Subscription	Publisher	McGraw Hill LLC
SE ISBN	9781266148552	TE ISBN	9780077007256
SW ISBN		Grade Level/Content	Third Grade Science

Core Instructional Material Designation *(Core Instructional 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 (90% and above)	☐	**Recommended with Reservations** (80-89%)	☑	**Not Recommended and Not Adopted** (below 80%)	☐

Total Score - *The final score for the materials is averaged between the team of reviewers.*

Average Score
84%

Cultural and Linguistic Relevance Recognition - *Materials are reviewed for relevant criteria pertaining to the support for teachers and students in the material regarding cultural relevance and the inclusion of a culturally responsive lens. Those materials receiving a score of 85% or above on the CLR portion of the review are recognized as culturally and linguistically relevant.*

CLR Recognized ☐

Average Score
56%

FOCUS AREA 6: CULTURAL AND LINGUISTIC PERSPECTIVES
Instructional materials represent a variety of cultural and linguistic perspectives.
Statements of appraisal and supporting evidence:

There is no evidence in the instructional materials that represent a variety of cultural and linguistic perspectives. The material focuses on science concepts that do not pertain to students' personal backgrounds.

FOCUS AREA 7: INCLUSION OF CULTURALLY AND LINGUISTICALLY RESPONSIVE LENS
Instructional materials highlight diversity in culture and language through multiple perspectives.
Statements of appraisal and supporting evidence:

No evidence of diversity in culture and language through multiple perspectives is found in the instructional materials. However, the materials include some resources and supports for English learners throughout the units/lessons.

Science Standards Review - *Materials are reviewed for alignment with the state adopted content standards, benchmarks and performance standards. The science standards include the performance expectations (PEs), disciplinary core ideas (DCIs), science and engineering practices (SEPs), crosscutting concepts (CCCs), and connections (CONNs) of the Next Generation Science Standards (NGSS). They also include the six NM StemReady! science standards.*

Average Score
84%

OVERALL ALIGNMENT
Materials align with the science standards overall.
Statements of appraisal and supporting evidence:

The instructional materials align with the science content standards. The standards that are addressed are indicated at the beginning of the TE in the performance expectations. The materials fall short on certain pieces of the standards. For example, for one lesson, the materials include the creation of graphs, but not those specified in the standard and one and two-step problems are not evident. In addition, the materials do not always provide opportunities for students to communicate their designs for the STEM modules.

MOTION AND STABILITY: FORCES AND INTERACTIONS
Materials align to the physical science performance expectations (PEs) and related components (DCIs, SEPs, CCCs, CONNs, and NM Standards) for this focus area.
Statements of appraisal and supporting evidence:

Based on the materials, students are able to demonstrate an understanding of motion and stability by means of planning and performing inquiry activities throughout each lesson. Lessons and objectives offer an examination of cause and effect relationships that allow students to plan and carry out investigations related to the performance expectations. For example, in the "Forces Affect the Way Objects Move" activity, the lesson directs students to determine how force affects a toy car's motion. Also, in the "Movement of a Wind-up Toy" activity, materials direct students on how to measure the speed of an object in motion.

FROM MOLECULES TO ORGANISMS: STRUCTURES AND PROCESSES
Materials align to the life science performance expectations (PEs) and related components (DCIs, SEPs, CCCs, CONNs, and NM Standards) for this focus area.
Statements of appraisal and supporting evidence:

The instructional materials align with the content standards on molecules. The materials offer opportunities for students to demonstrate understanding of growth and development of plants and animals by developing and using models. Students are asked to recognize patterns through their observations. The inquiry activities, passages and related assessments in the materials support the students in their learning about the life cycles of organisms.

ECOSYSTEMS: INTERACTIONS, ENERGY, AND DYNAMICS
Materials align to the life science performance expectations (PEs) and related components (DCIs, SEPs, CCCs, CONNs, and NM Standards) for this focus area.
Statements of appraisal and supporting evidence:

Through the materials, students have opportunities to construct arguments about how animals interact and behave in their groups as part of various inquiry activities and teacher prompts. In addition, the materials support student learning about animal survival as well as cause and effect relationships to explain change through observations, hands-on activities and data collection.

HEREDITY: INHERITANCE AND VARIATION OF TRAITS
Materials align to the life science performance expectations (PEs) and related components (DCIs, SEPs, CCCs, CONNs, and NM Standards) for this focus area.
Statements of appraisal and supporting evidence:

Through the materials, students explain how animals and plants inherit traits from their parents. Students are asked to utilize and interpret data to reveal patterns and relationships in simulations, such as the inquiry activities and STEM module projects. Alternative resources include video presentations, interactive links and discourse.

BIOLOGICAL EVOLUTION: UNITY AND DIVERSITY
Materials align to the life science performance expectations (PEs) and related components (DCIs, SEPs, CCCs, CONNs, and NM Standards) for this focus area.
Statements of appraisal and supporting evidence:

The materials provide students the opportunity to analyze and interpret data from fossils while providing evidence of organisms' environments in which they've lived. The materials provide information regarding how various plants and animals are no longer living. Students are given the opportunity to analyze data during the Fossil Dig inquiry activity in which students observe and understand how an environment changes over a period of time as well as learn what a fossil can tell about its environment. In the Layers and Fossils activity, students observe that phenomena exist from very short to very long time periods through the understanding that older fossils are buried deeper than more recent ones.

EARTH'S SYSTEMS
Materials align to the earth and space science performance expectations (PEs) and related components (DCIs, SEPs, CCCs, CONNs, and NM Standards) for this focus area.
Statements of appraisal and supporting evidence:

The materials require students to represent data to describe typical weather conditions and patterns. Students represent the data in a table and make predictions based on the data. In the Become a Meteorologist inquiry activity, students are required to collect data from weather maps and represent the data in a table in order to create a weather forecast.

EARTH AND HUMAN ACTIVITY
Materials align to the earth and space science performance expectations (PEs) and related components (DCIs, SEPs, CCCs, CONNs, and NM Standards) for this focus area.
Statements of appraisal and supporting evidence:

The materials allow students to make claims and design solutions based on the effects of natural hazards in the Build Sugar Structures activity. However, the materials lack ample opportunities for students to critique scientific explanations or solutions proposed by peers. Students are asked to observe cause and effect relationships by explaining the impact an earthquake has on a structure.

ENGINEERING DESIGN
Materials align to the engineering design performance expectations (PEs) and related components (DCIs, SEPs, CCCs, CONNs, and NM Standards) for this focus area.
Statements of appraisal and supporting evidence:

The materials provide STEM Module activities including one in which students engage in the engineering process by designing a self-closing gate while adhering to specific time and material constraints as stated in a rubric. During the design process, students are working to develop a new technology and are able to test their creation and reflect on alternate solutions. Students are provided opportunities to communicate at the end of the design process, but not throughout the activity.

CCSS for ELA and Math Grade 1 NGSS
Materials align to the identified ELA and math standards in the third grade NGSS.
Statements of appraisal and supporting evidence:

Overall, the materials are aligned with the ELA and math standards. Opportunities are provided for students to ask and answer questions to demonstrate their understanding of static electricity by referring to the text as a basis for their answers. Also, students use information gained from illustrations such as in the From Seed to Plant lesson in which students are provided with a visual to learn about germination. Students are also able to conduct short research projects such as when they research the impact of natural hazards. In math, students are given opportunities to reason both abstractly and quantitatively by observing animal traits and modeling data with math while observing the growth of lima beans and radish seeds. The math standards are incorporated, but the materials do not explicitly provide students with the opportunity to carry out base ten or fractions operations.

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

Average Score
94%

FOCUS AREA 1: PHENOMENA-/PROBLEM-BASED AND THREE-DIMENSIONAL APPROACH
Instructional materials are centered around high quality phenomena and/or problems and require a three dimensional approach to make sense of the phenomena or to solve the problems.

The instructional materials clearly integrate and describe the three-dimensional approach in order for students to make sense of phenomena or to solve problems. In the materials, a section titled "Three Dimensions at a Glance" is provided that lists the dimensions and where they are addressed within each lesson of the unit. Each lesson objective is also color coded to note the integration of the three dimensions within the lesson. Providing this integration allows for students to have discourse, making sense of the phenomena or solving problems within. Exploration through inquiry activities and STEM projects is evident throughout the materials.

FOCUS AREA 2: THREE-DIMENSIONAL ASSESSMENT
Assessments provide tools, guidance and support for teachers to collect, interpret and act on data about student progress toward the learning goals of the 3 dimensional standards.

The instructional materials are engaging and provide various types of assessments such as formative and summative. One example of a formative assessment that the materials provide is the Confidence Level Assessment in which students display the number of fingers to show how confident they are with their response to a question. For summative assessments, students are asked to review to demonstrate their understanding. An example is that students are prompted to go online and complete the vocabulary check and DCI for the lesson. The materials provide the opportunity for students to summarize, answer multiple choice questions and extend knowledge by making predictions based on research. The materials provide opportunities to receive feedback from peers, but there is no evidence of guidance for teachers to interpret and act on data about student progress toward learning goals of the three dimensional standards.

FOCUS AREA 3: TEACHER SUPPORTS
Materials include opportunities for teachers to effectively plan and utilize materials.

The instructional materials include resources including online resources, differentiated instruction, guided pacing of student learning, and interactive presentations for teachers to effectively plan and utilize materials. Some online resources include vocabulary flashcards. Also, the teacher's edition includes differentiated instruction. For example, as an extension, students are asked to make a magnetic compass and present to others. For students that are approaching, there are some sentence frames provided as some support.

FOCUS AREA 4: STUDENT CENTERED INSTRUCTION
Materials are designed for each student's regular and active participation in science content.

The instructional materials are designed for each student's regular and active participation in science content through a variety of media, prompts to reflect on prior knowledge, and opportunities for collaboration. Some examples include the Module Storyline, as it details a path students will follow to master the DCIs, SEPs, and CCCs. The Module Wrap sections provide prompts to reflect on student prior knowledge and connect it to new learning.

FOCUS AREA 5: EQUITY
Materials are designed for all learners.

The instructional materials include suggestions for all learners including extensions and opportunities for all students at a variety of levels. For those students approaching, the materials include sentence frames and suggestions for using graphic organizers. For on level students, the materials provide suggestions such as to draw a picture and write a short explanation of how a dynamo could be used to solve a problem. Lastly, for beyond leveled learners, some suggestions include students creating and sharing the electromagnetic spectrum. Materials also allow for self-reflection in the Page Keeley Science Probe. For EL students, there are different supports for entering and emerging, developing and expanding, and bridging and reaching. Some examples include providing pictures and asking wh-questions, providing sentence frames, and working in pairs to answer questions.

All Content Review - *Materials are reviewed against 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.*

Average Score
79%

FOCUS AREA 1 COHERENCE:
Instructional materials are coherent and consistent with the New Mexico Content Standards that all students should study in order to be college- and career-ready.
Statements of appraisal and supporting evidence:

The instructional materials are aligned with the standards. Included is a detailed path to the three dimensions at the beginning of the teacher's edition. In addition, within the lessons, the standards are color-coded based on the three dimensions.

FOCUS AREA 2 WELL-DESIGNED LESSONS:
Instructional materials take into account effective lesson structure and pacing.
Statements of appraisal and supporting evidence:

The lesson objectives are presented at the beginning of each lesson. Additionally, the structure of the lesson and pacing are included at the beginning of the module for teacher support. The lesson/module begins with a pre-assessment to activate students' prior knowledge, then moves into some inquiry about the content. After that, each lesson is set up to provide students with the necessary information to understand the content, which leads to deeper understanding when completing more inquiry activities. In the end, the lessons/module lead to students having to apply what they learned about the content and participate in a STEM project while demonstrating their knowledge.

FOCUS AREA 3 RESOURCES FOR PLANNING:
Instructional materials provide teacher resources to support planning, learning, and understanding of the New Mexico Content Standards.
Statements of appraisal and supporting evidence:

The instructional materials provide a wide variety of resources to support planning as is evident in pacing guides, lesson objectives, prompts, and opportunities for digital resources. The materials provide correlations between the modules and the standards. In addition, there is a module planner that includes pacing for each lesson, learning objectives, and vocabulary. Other resources include prompts for teachers, a teacher toolbox which guides teachers to identify preconceptions, and supports and strategies to engage all learners. The student edition also includes some resources that support learning such as highlighted vocabulary.

FOCUS AREA 4 ASSESSMENT:
Instructional materials offer teachers a variety of assessment resources and tools to collect ongoing data about student progress related to the standards.
Statements of appraisal and supporting evidence:

The instructional materials provide a variety of assessments and tools such as rubrics, discourse, and exit slips. The rubrics are used by both teachers and students during the STEM projects. Exit slips are used as a formative assessments to monitor students' understanding. Additionally, discourse is encouraged throughout the materials as students are expected to collaborate their findings on projects discussing what could change and why. Also, students are asked to talk with each other about the phenomena as a formative assessment. However, language objectives are not specifically addressed. There is no guidance for teachers to interpret data and/or student progress.

FOCUS AREA 5 EXTENSIVE SUPPORT:
Instructional materials give all students extensive opportunities and support to explore key concepts.
Statements of appraisal and supporting evidence:

The instructional materials provide suggestions for scaffolding and differentiated strategies along with English language supports and material to engage families in each lesson. At the beginning of each unit in the teacher's edition is a page with scaffolding and differentiating strategies to help all learners to include literacy support and English language support. Throughout the lessons, the materials provide additional suggestions for differentiated instruction for "Approaching Level," "On Level," and "Beyond Level."

FOCUS AREA 6 CULTURAL AND LINGUISTIC PERSPECTIVES:
Instructional materials represent a variety of cultural and linguistic perspectives.
Statements of appraisal and supporting evidence:

There is no evidence in the instructional materials that represent a variety of cultural and linguistic perspectives. The material focuses on science concepts that do not pertain to students' personal backgrounds.

FOCUS AREA 7 INCLUSION OF CULTURALLY AND LINGUISTICALLY RESPONSIVE LENS: **Instructional materials highlight diversity in culture and language through multiple perspectives.** *Statements of appraisal and supporting evidence:*
No evidence of diversity in culture and language through multiple perspectives is found in the instructional materials. However, the materials include some resources and supports for English learners throughout the units/lessons.

Reviewers' Professional Summary - *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 #: 22

Background and experience:

I have been in education for 24 years and currently hold a position as a K-5 Instructional Coach. I hold a master's degree in curriculum and instruction with a focus of English language arts. I also have a reading endorsement and I am TESOL certified. I have participated in HQIM reviews for three years.

Professional summary of material:

The instructional materials align with the current science standards of New Mexico. The materials provide multiple resources for teachers to engage students in science concepts while making connections to other content areas. The provided pacing guides and lesson guides are helpful for teachers as it is already difficult to teach all the standards. There is some integration that can easily be done in the materials reviewed. For example, there is some connection with ELA and math standards where students demonstrate their understanding by reading and writing in response to their learning. For math, students are asked to chart and graph data collected. Additionally, the materials are engaging to both teachers and students, with topics, images, and videos that students can connect with while learning new content. The organization of the materials makes it so that it is easy to navigate and consistent throughout all of the materials. In addition, the hands-on activities and STEM projects provide engaging ways for students to demonstrate their understanding of standards and to act as engineers. Overall, the instructional materials are of quality alignment with standards, and engaging for both teachers and students.

Reviewer #: 23

Background and experience:

I have been in education for five years and currently teach the fourth grade in the general education setting. I hold a master's degree in elementary education and a bachelor's degree in psychology and Spanish. My licensure is in K-8 elementary education with endorsements in modern and classical languages and bilingual education. I am also TESOL certified.

Professional summary of material:

Overall, the instructional materials are consistent with the current state standards. The materials are consistent and engaging for both students and teachers alike as they remain coherent and accessible throughout the units. Each unit workbook follows the same pathway, and the student materials are visually appealing. The materials offer extensive opportunities for access to learning including interactive videos and hands-on projects. The lessons within the units are effectively structured and paced for understanding. There are a variety of well-organized resources for both teachers and students to learn and understand the New Mexico content standards.

Reviewer #: 24

Background and experience:

I just completed my 22nd year as an educator in New Mexico where I have taught Spanish at the middle and high school levels. My teaching experience also includes having been a Spanish instructor at two universities. I hold a B.A. in Spanish and international studies as well as in elementary and secondary education. In addition, my master's degree is in Latin American literature. My licensure is in K-12 modern and classical languages and social studies. This is my 3rd year as a reviewer for the NMPED.

Professional summary of material:

I found the instructional materials engaging and well-organized. The lessons are progressive and show connectivity both in students' knowledge as well as sequence. The text includes engaging images and formative summaries for teachers to check for student understanding and mastery of the content. The hands-on activities and projects are grade-appropriate and support students in connecting with the content. The consistency throughout the materials makes it user friendly, as do the teacher support for a diversity in learners. The absence of evidence for cultural and linguistic integration is the sole area that posed difficulty for this material.