2024 Instructional Material Summer Review Institute

Review Team Appraisal of Title

Kindergarten 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 K, Comprehensive Student Bundle, 6 Year Subscription	Publisher	McGraw Hill LLC
SE ISBN	9781266140013	TE ISBN	9780077007225
SW ISBN		Grade Level/Content	Kindergarten 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
97%

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 90% or above on the CLR portion of the review are recognized as culturally and linguistically relevant.*

CLR Recognized ☐

Average Score
76%

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

Different cultures are represented in the materials through pictures, character names and stories. The materials provide videos and stories representing ethnic groups, highlighting diverse abilities of that group. Activities allow students to make real world connections to the environment around them.

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:

The materials offer descriptions of the appearances of cultures including traditional attire and artifacts. The instructional materials provide examples of cultures, and give resources and assessments in Spanish. However, there are not perspectives from those cultures included, such as character names and pictures pertaining to the ethnic culture but not pertaining to community cultural viewpoints.

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
98%

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

The materials align with the science standards for kindergarten. All components of standards are present in the material, performance expectations, SEPs, DCIs, CCCs, and CONNs as stated in the NGSS for kindergarten. Examples for unit 1 SEPs, DCIs, and CCCs are found in lessons 1 and 2. Further SEPs, DCIs and CCCs are found in lessons 3 and 4, and all of these are found in the module project.All units are laid out in this fashion to allow 3-dimensional learning to take place.

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:

Materials provide opportunity for students to engage with the performance expectations through inquiry activities such as "Move the Blocks". Students investigate the differences between pushing and pulling. Lessons incorporate hands-on activities that build on one another. Units contain hands-on activities that move from simple concepts, such as what a push and a pull is, to more complex ideas, such as forces and change of direction. These are brought out in grade level appropriate play, using games such as tug-of-war, kickball and bowling. The unit ends with students designing a marble course to support the three-dimensional learning.

ENERGY
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:

The materials align to the physical science performance expectations that relate to weather and the sun and earth's surface. Lessons allow students to engage in hands-on activities that provide them the opportunity to learn about severe weather and its patterns, and connections to weather forecasting. Lessons also provide students with opportunities to demonstrate proficiency in how sunlight warms the earth's surface and the effects it has on people. Students are given the opportunity to use simulation tools as well as hands on tools to engage with the content and record data to analyze. All lessons include related components (PEs, SEPs, DCIs, CCCs, CONNs).

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:

Through use of these materials, students use prior knowledge and experiences to describe patterns in the needs of plants and animals. Students compare living and non-living things. The materials give the students an opportunity to gain an understanding of what humans, plants and animals need and the natural resources they use. All lessons include related components. Students begin the unit of study with the simpler concept of sorting nonliving and living things, to more complex concepts such as what plants and animals need to survive. The materials allow students the opportunity for hands on investigations. For example, the students model understanding by building a bird's home. Three dimensional learning is incorporated at the end of this unit by students researching and then building a habitat.

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 give opportunities to learn about changes to the environment, and how plants, animals, and people change their environment to support their needs. Materials allow students to engage in their learning through hand- on activities, demonstrations and simulations. All lessons include related components (PEs, SEPs, DCIs, CCCs, CONNs). The "Earth Systems" unit starts by giving the students an opportunity to gain knowledge about changes to the environment then moves to more complex concepts such as how people and animals change their environments to meet their needs. At the end of this unit, students research and build a working beaver dam to test and redesign through three dimensional learning.

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 learning materials provide students with learning experiences that support the topic of Earth and Human Activity by gaining knowledge about natural resources and reducing, reusing, and recycling. The materials allow all students to conduct research on conserving water through a hands-on investigation. The activity directs the students to sort recyclables and take part in a demonstration on how to recycle paper and make it new. All lessons include related components (PEs, SEPs, DCIs, CCCs, CONNs).

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 allow students to use the K-2 engineering design standards throughout these materials to create and problem solve using models. The activities provide the student with the opportunity to evaluate, communicate and elaborate on ideas with each other. For example, students design a structure to make shade after researching what shapes make the best shade and why. During unit two, Protect the Earth, students are asked to make new tools from old things to show what they have learned about recycling and reusing. All lessons include related components (PEs, SEPs, DCIs, CCCs, CONNs).

CCSS for ELA and Math Grade K NGSS

Materials align to the ELA and math standards identified in the kindergarten NGSS.

Statements of appraisal and supporting evidence:

ELA and math components are found throughout each unit of the instructional materials and are identified as the standard found for kindergarten in the NGSS. Some examples include counting, comparisons, retelling text details, finding main ideas and speaking and listening standards. Unit 2, lesson 2, is one example of how ELA standards connect within the three dimensional learning. The materials direct the teacher to lead reading as a class, and students are asked to find key ideas and details (standard RL.K.1) and practice comprehension and collaboration through speaking and listening (standard SL.K.2). In unit 3, lesson 1, students make a graph to record their data about the weather. Students are using math standard K.MD.A.2.

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
100%

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.

Phenomena and/or problem-based and a three-dimensional approach is apparent throughout the units. The materials include assessments in both print and online. Each lesson is opened with a phenomenon that is relatable to kindergarteners, and comes back at the end of the lessons for student self-reflection. The activity allows the student to examine how their views of that phenomenon may or may not have changed.

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 materials and online components support guidance for teachers to interpret data surrounding student progress. Resources for assessments provide next steps for approaching-level learners as well as advanced learners. The online component provides data at a glance to teachers so they can see how students are progressing towards mastery of standards. This includes quick checks, lesson reviews, summative and formative assessments, as well as quick check ins through teacher scripted questioning.

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

Each unit is provided with a scope and sequence and a list of materials required for investigations. It also provides teachers with lesson details to support instructional materials fully and also how to compact it if time does not allow. Each section of a lesson provides teachers with a timeframe and all hands-on activities come with a supply list to support teachers in being prepared. The materials also provide videos to support teachers with teaching strategies and lessons that can be presented via technology using a slide show.

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

The materials give opportunities for students to share with peers, with the teacher, and to self-reflect. Different strategies in the materials allow students to participate in hands-on activities to support collaboration, and independent learning. Throughout the lessons, teacher questioning allows the teacher to know where students are in their learning and create flexibility for student centered instruction. The materials provide scripted questions to ask, and then it is followed up with a guide for correct student answers and what to do if they are above level, on level, or below level.

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

The materials provide teachers with differentiated instructional strategies, suggestions for support with ELs and opportunities for all students to engage in grade level learning. Assignments and assessments can also be utilized via technology. Activities include read alouds, videos, and interactive presentations. Lessons provide multiple entry points and scaffolds. An example of this is in TE unit 1, lesson 2, page 20, a bellringer that starts the class with a whole class discussion, further information provided by a read aloud and then continued learning provided by a video. The activity provides students the opportunity to discuss their perspective and represent their thinking with a drawing.

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
92%

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:

These materials include all the necessary standards for kindergarten students stated by NGSS. They also support ELA and math standards. Coherence with NGSS is evident through the consistent 3-dimensional learning addressed by all kindergarten NGSS. All ten content standards plus engineering standards are addressed with connecting standards to ELA and math.

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

The lessons are structured to support the learner through scaffolded lessons that build upon each other. Pacing of lessons provides the teacher with timeframes that are reasonable for most classrooms. Each module has a planner with goals, skills, and concepts to be taught with timeframes. Additional resources are found on the online resources such as vocabulary flashcards, slide show presentations, read alouds, picture cards, and lesson videos.

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 materials include teacher resources to plan for student misconceptions, as well as differentiated instruction. This material gives teachers a clear scope and sequence. The TE provides a list of materials needed for each step of the lessons. Additional resources are found on the online resources, such as vocabulary flashcards, slide show presentations, read alouds, picture cards, and lesson videos. The online component also provides teachers with instructional strategy videos, and the printed materials include a teacher toolbox for understanding science content. The lessons equip teachers with tools for possible student misconceptions for each lesson.

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:

Assessments provided in the instructional materials provide teachers with rubrics and feedback for struggling students through the use of quick checks. The online component provides teachers with on-going data when assignments are used through computer technology. To support quick checks for understanding, teachers are provided with scripted questions and guidance on where to go next based on students answers. The materials include pre-assessments, summative assessments, and formative assessments for all lessons.

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

Quick checks allow for students to go back if needed or go more in depth within the same concept. The materials provide opportunities for struggling students to be supported by peers and their teacher. Each concept has activities that give students opportunities for student discourse as well as multiple entry points. The materials give the teacher information on how to execute lessons in a dual language format. The materials provide assessments and student consumable pages in Spanish. The instructional support materials give teachers the flexibility to take questions out or add questions from the online assessment tool. The materials allow support for struggling students or activities to extend knowledge for those who need more. The instructional materials also include a parent letter and activity to do at home to support learning within each unit of study.

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

Different cultures are represented in the materials through pictures, character names and stories. The materials provide videos and stories representing ethnic groups, highlighting diverse abilities of that group. Activities allow students to make real world connections to the environment around them.
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:*
The materials offer descriptions of the appearances of cultures including traditional attire and artifacts. The instructional materials provide examples of cultures, and give resources and assessments in Spanish. However, there are not perspectives from those cultures included, such as character names and pictures pertaining to the ethnic culture but not pertaining to community cultural viewpoints.

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 #: 19

Background and experience:

My bachelor's degree in education includes a science endorsement. I also have a TESOL endorsement with a master's in educational leadership. My teaching licenses are a Level 3 and a K-12 administrator license. I have spent the last year as the district TOSA supporting science instruction in classrooms K through 12 as well as at the district level.

Professional summary of material:

Overall, these materials are very user friendly and grade level appropriate. They allow for each lesson to address every related component of the NGSS. There are Spanish materials provided online that include assessments in Spanish. I appreciate the layout of each lesson as it begins with a very relatable phenomenon and goes through different components, including hands-on activities and engineering practices, before coming back to the phenomenon. The material provides a space for student and teacher self-reflection. This material also gives many resources for differentiated instruction, and real time check-ins for student understanding. The online piece is a little hard to navigate at first but does get better as you become more familiar with it. This material integrates and provides all the components of science instruction. The only shortcoming for this material is that the CLR lens is not apparent throughout, and it doesn't include strategies like notice and wonder charts or scientist circles.

Reviewer #: 21

Background and experience:

Teacher of 12 years in a 1st or 2nd grade general education classroom. I hold a level II license with a TESOL endorsement and hold a master's degree in curriculum and instruction.

Professional summary of material:

Inspire Science instructional materials supply teachers with an excellent resource to teach the NGSS to the students in their classrooms. The materials provide well thought-out lessons that build upon students' background knowledge in order to lay a foundation to achieve proficiency in the science standards addressed for the kindergarten grade level. The instructional materials provide cross curricular opportunities by incorporating ELA and math concepts into lessons throughout the units. All units provide hands-on activities to further explore a phenomenon and provide students with investigations to gather and interpret data to support them in problem solving. Each unit includes STEM activities to increase critical thinking and reflections. Teachers are provided with supports for ELs and given strategies for differentiated instruction. Assessments and assignments can be given via technology and in English or Spanish. While this instructional material is well rounded to support the learning of NGSS, it still lacks in the CLR lens. In general, the Inspire Science material would benefit the classrooms it is used in.