2024 Instructional Material Summer Review Institute

Review Team Appraisal of Title

Second 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 2, Comprehensive Student Bundle, 6 Year Subscription	Publisher	McGraw Hill LLC
SE ISBN	9781266145087	TE ISBN	9780077007249
SW ISBN		Grade Level/Content	Second 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
93%

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
47%

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

The materials provide videos online that represent different groups of people, but nothing is present in print. There is no evidence of a variety of cultures and linguistic perspectives in this material. There is also no evidence to support students in making connections to real-life experiences and diverse cultural and linguistic 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:

There is no evidence that the instructional materials engage students in critical reflection about their own lives in New Mexico nor have ties to the present or past. There is also no evidence found to support addressing multiple descriptions, interpretations, or perspectives of events and experiences.

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
96%

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

The materials align overall with the NGSS for 2nd grade. Each module contains all the SEPs, CCCs and DCIs to support the students with three-dimensional learning. Through the use of phenomena and hands-on activities, the lessons support the learner and provide the opportunity to complete unit STEM projects.

MATTER AND ITS 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:

The materials align with the standards and related components. The materials provide opportunities for students to show mastery of physical science performance expectations through the study of vocabulary, SEPs, DCIs, and CCCs. The materials provide the students with the chance to investigate, and test and analyze materials. Students are also provided the opportunity to do hands-on projects, build with materials and see how materials can change through simulations.

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:

The materials completely align with the life science standards. The materials give students the opportunity to learn about plants' needs and how animals help plants. The lessons include opportunities for students to investigate how plants need water and light to survive, how plants depend on animals to disperse seeds, and end the unit with a STEM project asking them to build a tool that supports pollination.

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 align with the standards and related components. The materials provide an opportunity for students to compare the diversity of life in different habitats, both on land and in water. The materials provide the students with the opportunity to encounter phenomena through hands-on activities and research that supports them in learning about their local habitats, the desert habitat and water habitats. The students are given a chance to use their findings to compare and contrast the different habitats and finish the unit with a STEM project providing the chance to build a habitat.

EARTH'S PLACE IN THE UNIVERSE
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 align with the standards and related components. The materials provide students with an opportunity to use information from several sources to provide evidence that earth's events can happen quickly or slowly. The materials provide the students with the chance to encounter the phenomenon and investigate it through learning about slow and quick changes to the earth's landscapes.

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 align with the standards and related components. They provide the opportunity for students to learn about erosion from water and air, and to study earth's bodies of water and their differences. Students are given the opportunity to learn about the difference between solid (ice) and liquid (water). The materials provide the students with the chance to encounter the phenomenon and investigate it through hands-on activities that provide the student with the chance to learn about changing landforms through erosion, through the study of earthquakes and volcanoes, and how to support the earth by preventing erosion. The unit concludes with a STEM project providing the opportunity to design a way to reduce erosion.

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 align with the standards and related components. The materials provide the opportunity for students to engage in STEM activities that give them the chance to design, build and test models. These projects are found at the end of each module and found in all units.

CCSS for ELA and Math Grade 2 NGSS

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

Statements of appraisal and supporting evidence:

The materials partially align with the math grade 2 standards for science and align with the ELA grade 2 standards for science. The materials provide students with ELA connections by finding key details in a text, comparing and contrasting, and by creating shared research projects that include writing and publishing using digital tools. Students are also provided with multiple opportunities for speaking and listening, as well as language objectives through vocabulary acquisition. Math connections are very limited within the materials, providing students with some math connection but not including math practices or addressing all the math connecting standards. The math standards are not present in every unit or module.

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
98%

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 materials provide students support in their sense making of the phenomena through discourse and vocabulary instruction. They are able to move through grade appropriate learning in all three dimensions. Natural phenomena are reviewed here through the three dimensions. The materials offer the teacher information on connecting lessons to three-dimensional thinking and guidance on facilitating student discussions about observations from hands-on activities.

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 include lesson review pages that provide a summative assessment. Further assessment resources are available online through vocabulary checks and lesson checks. The activities in the lessons allow for whole class discussion and discourse. Teachers are provided strategies for facilitating and giving feedback to students, as well as encouraging space for student self reflections.

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

The materials provide the teacher with a "Planner" that provides a list of items needed to support preparedness for all activities in a unit. The materials also provide professional learning videos found online to support the teacher on how to set up activities. They provide strategies for ELs and differentiated instruction and building science background knowledge. The materials provide the teacher with online resources to support the students' learning with interactive slideshow presentations, vocabulary flashcards and science songs.

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

The materials provide students with an "Extend It" activity where they are able to pull from their past learning to problem solve and think critically. Students are able to use what they have learned to help in completion of the project. The materials provide the teacher with questions to ask the students and encourage them, building on prior knowledge and their curiosity about the newly introduced phenomenon for each unit.

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

The materials provide teachers with ways to support all learners through differentiation and extension, including an assessment building tool that allows teachers to scaffold for students. The materials provide the teacher with the option of using the online student workbooks to assign content. It also has an Accessible Student Edition online to support diverse learners. The lessons allow for student reflection of learning in each lesson review. It also includes EL supports. The "Inquiry Rewind" supports all students by providing step by step procedures and expected observations.

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
81%

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:

Each lesson starts with a phenomenon, then goes through the content standards, building knowledge for the students as they go, and then returning to the phenomenon with a review utilizing three-dimensional thinking. The materials provide the teacher with information to show progression of learning through each activity and also provide rubrics and checklists to gauge the level of progress students are making with each standard.

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

The materials provide the teacher with the standards being taught and what lesson they are found in. They also show the progression of the standards for each module. The material lays out the lesson progression for teachers showing how each lesson builds on the previous lesson and concepts. Learning throughout the lessons builds upon previous learning to create connections for students.

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 provide a resource for teachers to plan each module, both with time and materials. Every lesson provides a teacher toolbox of lesson strategies as well as online professional development for teachers. Teachers are provided with ways to present the phenomena and how to explain them. They are also given resources online to help with explanations and student questioning. The material provides the teacher with identifying preconceptions that students might have and how to address them. It also provides instructional strategies that support the students who are approaching grade level, on grade level and beyond grade level.

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 materials include "Quick Checks", providing teacher questions to gauge where students are in their learning. Summative and formative assessments are evident throughout the materials. The online assessment tools help teachers to differentiate for students who might need it. The materials provide a resource called "Inquiry Rewind" that allows for scaffolds to the projects. The online assessment tool provides teachers with a way to scaffold assessments for students who need it. The online materials have assessments that can be taken both in English and Spanish. Rubrics are also provided to support the teachers in scoring students in a common way and supporting them in the next step of learning.

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 materials can be customized based on students needs. Questions can be added and taken out. Students can use the accessible student edition, which is all digital, to support diverse learning. The online materials allow for the teacher to be able to create an assignment using external tools and also upload files or import from a Google Classroom platform. The materials provide the teacher with strategies that support the students who are approaching grade level, on grade level and beyond grade level. The materials also provide strategies to use with advanced and gifted learners as well as ELs.

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

The materials provide videos online that represent different groups of people, but nothing is present in print. There is no evidence of a variety of cultures and linguistic perspectives in this material. There is also no evidence to support students in making connections to real-life experiences and diverse cultural and linguistic 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:*
There is no evidence that the instructional materials engage students in critical reflection about their own lives in New Mexico nor have ties to the present or past. There is also no evidence found to support addressing multiple descriptions, interpretations, or perspectives of events and experiences.

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 and a master's in educational leadership. Level III teaching license and K-12 administrator license. I have spent the last year as the district TOSA for science 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 absolutely love the layout of each lesson, as they begin with very relatable phenomena and go through different components, including hands-on activities and engineering practices, before coming back to the phenomena. They provide a space for student and teacher self-reflection. This material also gives 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 does a great job of providing all the components of science instruction. The only shortcoming for the material is the CLR lens is not present, and it doesn't include strategies like notice and wonder charts, or scientist circles. This material also does not address math connecting standard.

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 a resource to teach the NGSS to the students in their classrooms. The materials provide well thought-out lessons that build upon students' background knowledge to lay a foundation to achieve proficiency in the science standards for second grade. The instructional materials provide cross curricular opportunities by incorporating ELA 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 the CLR lens. The materials also lack in incorporating math standards within the units to support the students with their mathematical thinking. The online component is also not very user friendly and it is time consuming to find the resources and components needed. In general, the Inspire Science material would provide a good foundation for the learning of the NGSS.