2024 Instructional Material Summer Review Institute

Review Team Appraisal of Title

Grades 6-8 Life 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 Life Science, Comprehensive Student Bundle with Actively Learn Science, 6-year Subscription	Publisher	Inspire Science Earth & Space Teacher Edition Bundle (Unit 1-4)
SE ISBN	9781266219108	TE ISBN	9780076883820
SW ISBN		Grade Level/Content	Grades 6-8 Life 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
56%

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

The Science Probes and introductory phenomenon within each unit allow students to bring in their own understanding of science concepts, including their own cultural or ethnic perspective on scientific concepts. Discussions throughout the units have students grouped in different ways for sharing their individual perspective and learned information from the lessons. The material does not show graphic representations or pictures of all cultures that may be participating in a classroom setting.

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 provide online resources for EL teaching techniques, dual language instruction (for Spanish), and glossaries in various languages. The instructional materials provide research and scaffolding strategies for all learners but the student edition and teacher edition do not have explicit tools or resources annotated or integrated within them. The materials show little to no representation of culture or demographic regions in New Mexico. Asset based perspectives and representations of diverse demographic groups of people are not apparent in the materials.

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
94%

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

The instructional materials address the NGSS in a coherent manner that provides instruction to students in the life science and engineering standards at a grade appropriate level. The materials provide correlation to each of the performance expectations and standards by grade level. There is a balance of listening, speaking, reading and writing activities throughout the material.

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 life science performance expectations by providing opportunities for students to investigate the interrelatedness of structures and functions of cells, tissues, organs, and organ systems. Students are asked to compare unicellular and multicellular organisms. Students are asked to investigate matter and energy flow within organisms, such as photosynthesis and cellular respiration.

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 align with the PEs and related components (DCSs, SEPs, CCCs, CONNs, and NM standards) for this topic because they provide opportunities for students to explore the interdependence between organisms in ecosystems. This exploration includes the relationship between inter and intra species with their environment, including abiotic and biotic factors. Genetic engineering is explored as the connection between science and society.

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:

The materials provide investigations and research into how reproduction occurs in both plants and animals and how certain behaviors and/or traits increase the likelihood of reproduction. The materials provide multiple labs and investigations for students to explore phenomena like mutations, inherited traits, and natural selection.

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 have students analyze and interpret effects of environmental change on populations. They explore evidence that supports how organisms change over time and summarize learning on the fossil record using graphs and charts to identify patterns. Students are tasked to investigate patterns in different organisms to determine evolutionary relationships, including similarities in embryological development and similarities in homologous structures.

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 a guide for writing a problem statement and asking questions in engineering. The materials provide a guide for defining a design problem. They provide real-world connections activities for students to write a plan and explain technological impacts on society and the natural world. The materials provide suggestions for ways to optimize design solutions.

CCSS for ELA and Math in Grades 6-8 NGSS **Materials align to the ELA and math standards identified in grades 6-8 Life Science NGSS.** *Statements of appraisal and supporting evidence:*
The materials incorporate both science and ELA standards throughout. The materials provide students a reading from a scientific text to draw conclusions and provide a summary of the text. The materials provide an evaluation tool at the end of the unit with which students can distinguish claims supported by reasons and evidence from class that have possible negative side effects. Additional resources in the online materials provide students with review and practice in both ELA and math standards addressed in this band of standards. Graphical displays of data rely on line graphs and histograms.

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
99%

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 center around phenomena and are aligned to SEPs, CCCs, DCIs and common core math and ELA standards. The materials provide the students the opportunity to apply 3-dimensional thinking to respond to prompts both in writing and in discourse with a group. The instructional material encourages students to use CCCs, DCIs and SEPs to evaluate and comprehend questions and problems presented, including developing and using models, analyzing and interpreting data, and constructing explanations and design solutions.

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 provide students meaningful tasks across all dimensions. The materials include opportunities for students to self-reflect. The materials provide students with various types of meaningful and relevant activities for both formative and summative assessments, and the TE supplies formative and summative assessment opportunities to guide teacher review of student work. The materials provide differentiated material to assess student learning in a variety of ways. The materials provide the use of oral, written and engineering designs to show mastery of biological concepts.

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

Within the teacher editions, the materials allow for effective lesson planning. Teachers have access to well organized materials for each activity as well as lab safety instructions for both teacher and students. The instructional materials provide a list of materials and teacher guidance to support activities in a safe manner. The materials for each unit provide teacher guidance for students at, approaching, and exceeding grade level expectations.

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

The materials provide encounters with phenomena and access prior knowledge to address possible student misconceptions at the beginning of modules. The materials have both text and visuals that depict the flow of learning and how they are connected from one concept to the next. Diverse examples are provided in the material that demonstrate the coherent, meaningful, direct flow of lessons, which is made apparent to students in the "It's All Relative" introductory paragraph. The materials provide questions that allow students to share learned experiences with peers and opportunities that encourage students to participate in designing and carrying out engineering projects.

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

The teacher materials allow for diversifying lessons by adjusting instruction to accommodate for different learning styles, cultural diversities, and varying academic proficiency levels. The materials and assessments are designed in a structured, accessible manner and include multiple ways for all students to build and reflect on science knowledge as demonstrated through the investigations and labs throughout all the units. The materials provide extensions for students, for example, to explore seeds from other flowering and nonflowering plants. The materials also provide students multimedia resources to access learning of content. Students can use paper and pencil or type in the online resource for each lesson. Many features include support for language learners. The student editions include prompts for students to reflect on learning and go back to revise their thinking.

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
84%

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 materials provide correlation to each of the performance expectations and standards by grade level. The materials provide 3-dimensional learning, and grade level standards are listed and referenced in specific lessons throughout the lessons and units. Students have multiple avenues to acquire the knowledge in this grade band, including independent, partner, and large group writing and speaking opportunities. The materials repeatedly mention "as you read earlier" to link prior knowledge to current lesson activity. Formative assessments, summaries, and real-world connections assist students in connecting concepts and ideas in the instructional materials. The materials adhere to the New Mexico standards. They provide opportunities to incorporate real-life problem-solving skills with engineering, math and science concepts and also make connections between social studies and language arts.

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

The teacher editions provide a detailed breakdown of each DCI, SEP, and CCC and where each appears in the Unit. These standards and skills appear in multiple places in each unit and module. The instructional materials follow a 5E format for each module: Encounter the Phenomenon (ENGAGE); Explain the Phenomenon/Labs & Investigations (EXPLORE/EXPLAIN); Formative Assessments (ELABORATE); Review/Real-World Connection (EVALUATE). Teachers have access to online resources and can provide these to students as necessary. Each module has a pacing guide to allow teachers to effectively plan their lessons.

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 multiple breakdowns of lessons, standards, and time-frames for planning lessons, modules and units. The materials provide left-side/right-side columns in the teacher edition with guidance for the teacher presentation of the material, including questions to ask, background information, possible student responses, ways to guide investigations, extensions, assessment questions and answers and sentence frames. The instructional materials provide multimedia support for students and give teachers professional support in how to use them. The materials provide students with digital learning opportunities in every lesson, including animations of phenomena, interactive presentations, and/or research extensions of labs and investigations.

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 formative and summative assessments including the ability for teachers to construct their own assessments using the online platform. The materials include assessments as students master each standard and provide corresponding standards and language objectives with the assessments. The instructional materials provide opportunities for students to be assessed in various ways including multiple choice, short answer, extended response, presentations, oral response, modeling and diagramming, and projects in both group and individual settings. The instructional materials provide support for instructing students, using differentiation strategies, and provide Spanish language assessments and materials; however, the assessment materials do not have clear guidance for teachers in terms of providing differentiation in all assessments for the content. Culturally diverse students and students with IEPs are not specifically addressed in assessments.

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 ways to customize learning opportunities to meet the needs of all learners, including using online models or presentations, extended exploration of key concepts and researching areas of interest. The materials offer extensions and further research throughout the units to support the needs of advanced learners. The materials offer different student grouping strategies and a variety of presentation strategies along with the EL Teaching Techniques Online. The materials offer online resources with unit introduction letters to send home that introduce families to goals, objectives, and modules of the lesson topics. The material is not accessible for families to assist students at home.

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

The Science Probes and introductory phenomenon within each unit allow students to bring in their own understanding of science concepts, including their own cultural or ethnic perspective on scientific concepts. Discussions throughout the units have students grouped in different ways for sharing their individual perspective and learned information from the lessons. The material does not show graphic representations or pictures of all cultures that may be participating in a classroom setting.

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 provide online resources for EL teaching techniques, dual language instruction (for Spanish), and glossaries in various languages. The instructional materials provide research and scaffolding strategies for all learners but the student edition and teacher edition do not have explicit tools or resources annotated or integrated within them. The materials show little to no representation of culture or demographic regions in New Mexico. Asset based perspectives and representations of diverse demographic groups of people are not apparent in the materials.

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 #: 46

Background and experience:

I hold a B.S. with a double major in biology and Spanish from UNM. I also obtained an M.S. in biomedical sciences with a concentration in molecular virology from UNM. I went on to get an M.A. degree in professional counseling from NM Highlands University. My Doctor of Philosophy degree is from NMSU with a concentration in educational administration. I hold a teaching license from UNM with an endorsement in science, classical and modern languages, and health. I have experience teaching university courses in biology, public health, physical education, science education and leadership courses at both the University of Phoenix and New Mexico State University. I also have been on committees that have adopted new material at the k-12 level. I have worked to develop education courses for teachers, parents and the community through the University of Phoenix.

Professional summary of material:

The materials are well organized and provide a variety of different lessons, allowing the teacher to be able to use the materials to address different learning needs, including students with learning differences, English language learners and students who are below or above proficiency. The materials allow for student access using both online and hard copy versions. The materials are well aligned to science content standards: PE, DCIs and CCCs. These materials provide great support for new teachers. Suggestions for differentiated material are provided throughout the text in extended lesson suggestions. Inquiry labs include building an artificial coral reef and building a museum exhibit. The materials do not represent the diverse population of New Mexico well. There is not reference to this demographic area nor to the needs of the various populations of New Mexico.

Reviewer #: R47

Background and experience:

I hold a bachelor's in university studies in visual communication with minors in both mathematics and astrophysics. I am a Level III teacher with a K-8 license with an endorsement in gifted education. I have taught a total of 17 years with the last 11 in middle school math and science. I have previously taught earth science in 6th grade and physical science in 8th grade as well as computer-aided drawing and animation in summer courses for students in grades 5-8.

Professional summary of material:

Inspire Science: Life is a comprehensive set of instructional materials for the life science standards found in the Grade 7 band of the NGSS. The units are well designed and follow an easy to use format. The teacher materials provide a wide variety of prompts and suggestions for support for all learners. Students have access to a variety of learning opportunities that can be customized for all learners at different levels of knowledge and skills. The materials require students to revisit prior thinking to reflect on as the instruction moves through a logical progression of standards. The end of module STEM Module Projects offer students opportunities to use critical thinking skills, creativity, and problem-solving skills to complete them. While the instructional materials provide a comprehensive foundation based on science standards, diverse cultural and linguistic groups are not represented in the student editions. The teacher editions do not provide multiple prompts to elicit cultural or linguistic backgrounds of diverse demographic learners. The instructional materials provide support for both new teachers and veteran teachers. The online resources are set up in a reasonably user-friendly manner.

Reviewer #: 48

Background and experience:

I have been a teacher in education for 25 years . I am originally from Nevada where I attended UNLV. I received my BS in elementary education with a focus in math education. I obtained my M.Ed in instructional and curricular studies with a concentration on representation in mathematics education. I have taught K-12+ with 15 years experience teaching in the science classroom. I currently hold Level III Licenses (K-8) (5-9)(7-12) with endorsements in science, mathematics, TESOL, and coaching.

Professional summary of material:

The materials are well-organized and easy to follow for teacher planning (using the pacing guide) and instructional purposes. The materials provide engaging phenomena and lab/investigation activities for students. There are multiple opportunities for discussions, presentations, sharing, and both peer and teacher feedback to projects and content. The materials are aligned with the standards and each standard addressed is easy to locate. The materials have a consistent structure that will assist in answering "what are we doing today?" question from students. Teachers may need to supplement with CLR activities that relate to New Mexico.