2024 Instructional Material Summer Review Institute

Review Team Appraisal of Title

Grades 6-8 Integrated Science I

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	6th Grade OSE MS Student Notebook Bundle	Publisher	Activate Learning
SE ISBN	9781682319123	TE ISBN	9781682319154
SW ISBN		Grade Level/Content	Grades 6-8 Integrated Science I

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
87%

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
83%

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

Materials directly teach affirming student backgrounds, with included teacher tools and resources, support for emerging multilingual learners, a Spanish language student edition, and frequent opportunities to work in chosen peer groups. Images and information represent a broad range of demographic groups and do not reinforce stereotypes. Activities are provided that reinforce students making interdisciplinary and real-life connections from a variety of 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:

Materials include strong, research-based guidance on how to plan for instruction for a variety of student levels and students coming from diverse backgrounds. Materials validate first-person accounts from a variety of cultures and locations in the world. Materials engage students in critical reflection of their own lives.

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
85%

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

The materials include comprehensive unit plans with detailed lessons. A teacher edition, student edition, teacher handbook, student notebook, and online slidedeck are provided. Extensive, rigorous lessons follow science standards, being data driven and evidence based. Thermal Energy, Rock Cycling & Plate Tectonics, and Cells & Systems units are standouts for the content taught. The materials are missing direct instruction on the weather cycle and variables in math.

LIGHT WAVES, PARTICLES, TEMPERATURE, STATES OF MATTER, THERMAL ENERGY TRANSFER
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 instructional materials align with the physical science performance expectations and related components by making connections to the phenomenon through several activities such as exploring sound waves in musical instruments, how light shines on and through objects, investigations into energy transfer through a “Cold Cup Challenge," and modeling the movement of energy transfer and energy effects on particle motion.

WATER CYCLING, WEATHER, CLIMATE
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:

These instructional materials thoroughly cover NM STEM Ready! Science standards related to water cycling, weather, and climate. The "Roles of Water in Earth's Surface Processes" are supported in lessons by having students plan and carry out investigations and by CCC academia strategies such as cause and effect.

ROCK CYCLING, PLATE TECTONICS
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 instructional materials align with the earth and space science standards and performance expectations through a variety of lessons that include predicting the future movement of tectonic plates by modeling the past movement of the plates; analyzing maps of the earth’s tectonic plates; modeling the causes and effects of tectonic plate movement; and analyzing the growth of Mt. Everest and using that information to determine if other mountains are growing.

NATURAL HAZARDS
Materials align to the earth and space science and 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:

This instructional unit uses Tsunamis as the focused phenomenon. Engineering and design of emergency communication systems are examined for problems and potential solutions. Research is an important part of determining cause, risk factors, and prioritization of resources.

ORGANISM GROWTH, CELLS, AND SYSTEMS
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 standards and performance expectations and related components through several activities that aim to answer the question “How do living things heal?". The materials offer students opportunities to make inferences on the healing process; compare the healing process to the growing process; investigate the structure and function of skin, muscles and bones through a video of a dissection of a chicken wing; learn about blood by viewing prepared samples under a microscope; make claims; and provide reasoning as to why all living things are made of cells.
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:*
Several engineering projects from this unit are developed, modeled, and checked for optimization. Projects include a thermal cup challenge, making a thunderstorm simulation, and creating precipitation in a micro environment.
CCSS for ELA and Math in Grades 6-8 NGSS **Materials align to the ELA and math standards identified in grades 6-8 Integrated Science I NGSS.** *Statements of appraisal and supporting evidence:*
The instructional materials include frequent attention to the skills of listening, speaking, reading, and writing. The materials incorporate ELA standards and additional reading materials and are data focused, instructing students to correctly use precise details. The materials contain exercises that include predicting, collecting data, making sense of the data, and making connections. The activities task students with synthesizing their ideas through written explanations in regard to their data tables and graphs. Individual, turn & talk, small group, and whole group exercises are consistently instructed.

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 incorporate real-world questions in order to engage and challenge students. The materials also provide visual aids, including charts and video links. Each lesson is explicitly outlined. The student provided notebooks list Science Classroom Norms, Communicating in Scientific Ways, Peer Feedback Guidelines, and Receiving Feedback from Peers.

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 have a 5-tiered assessment strategy that includes pre-peer, formative, summative, and self assessments. Each tier of assessments evaluates practices, core ideas, and crosscutting concepts. Assessment guidelines and rubrics are provided.

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

The instructional materials include opportunities for teachers to effectively plan and utilize materials by providing a list of needed supplies, guidance on how to use technology to support learning, guidance to help struggling students, and guidance on monitoring students and providing feedback.

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

Lessons relate to real-world questions and include interactive activities, videos, group work, model building, and time for synthesizing the information that has been learned. Lessons within each unit build on one another, and students are frequently asked to reflect on the previous lesson as they begin the new lesson.

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

Throughout each lesson, students are motivated to turn & talk, work in small groups, share out to the whole group, and to pose additional questions. Lessons frequently include hands-on activities and working with peers. Tips for creating a word wall are provided. Questions and activities are engaging for students, such as the building of a molecular model using marshmallows.

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
93%

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:

Instructional materials are scoped and sequenced to bridge upon one another. There are pacing times for each unit, lesson, and lesson segment. There are also bridging concepts suggested between each lesson.

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

The instructional materials include consistent, effectively paced, and well-designed lessons that provide a scope and sequence of skills and concepts. Each lesson contains clear measurable standards, aligned content, and lesson objectives. The instructional material contains features that aid teachers and students to make meaning from text, and include instructional guidance that allows students to retain and practice knowledge and skills.

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:

Units are clearly labeled, with provided unit overviews, storylines, and teacher background knowledge lists. Lessons are accessible, including a Materials List and Learning Plan Snapshot. Home Communication is included in each unit plan. Instructional materials provide student work samples and assessment keys. Remote Learning Resources are easily accessible.

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:

This instructional material has informal and formal assessment opportunities. Informal includes pre-, peer, and self assessment. Formative and summative assessments are included. Each tier of assessments evaluates practices, core ideas, and crosscutting concepts. Assessment rubrics are provided for gathering accurate student data.

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

This instructional materials set has supports such as simulations, videos, slide decks, additional support websites, self-evaluation worksheets, a text-to-speech app, slide presentations and graphic organizers.

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

Materials directly teach affirming student backgrounds, with included teacher tools and resources, support for emerging multilingual learners, a Spanish language student edition, and frequent opportunities to work in chosen peer groups. Images and information represent a broad range of demographic groups and do not reinforce stereotypes. Activities are provided that reinforce students making interdisciplinary and real-life connections from a variety of 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:

Materials include strong, research-based guidance on how to plan for instruction for a variety of student levels and students coming from diverse backgrounds. Materials validate first-person accounts from a variety of cultures and locations in the world. Materials engage students in critical reflection of their own lives.

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 #: 61

Background and experience:

Level III teacher with thirteen years of experience teaching special education grades K-12, with a current focus in the middle and high school years. ELA endorsement. BA from the University of California, Berkeley. Master's degree from the Institute of American Indian Arts in Creative Nonfiction. Fourth year working with the Summer Review Institute.

Professional summary of material:

Activate Learning Middle School Science Materials are extensive and engaging. Unit plans are detailed, with home communication, storyline, attending to equity, background knowledge, materials list, and word wall suggestions. Materials directly teach how to affirm student backgrounds, with included teacher tools and resources, support for emerging multilingual learners, Spanish language student edition, and frequent opportunities to work in chosen peer groups. Throughout each lesson, students are motivated to turn and talk, work in small groups, share out to the whole group, and to pose additional questions. Teachers are offered suggested prompts, sample responses, and what to listen and look for. Instructional materials honor first-person accounts and images of people from a variety of cultures.

Reviewer #: 62

Background and experience:

I have been a science teacher for twelve years. I graduated from the University of New Mexico in 2011 with a bachelor's degree in Geography and Earth and Planetary Science and obtained my teaching credentials from Central New Mexico Community College shortly after that. I currently hold a K-12 teaching license in the state of New Mexico with endorsements in science and health.

Professional summary of material:

I found the OpenSci Ed material to be engaging and relevant to today's learners. The teacher instructions provided contain a clear storyline that follows a logical progression for learning. Students use a variety of methods to interact with the standards as they gain knowledge and skills. Many of the lessons include hands-on activities and modeling, which is fundamental to understanding science. This material is superior overall and would benefit any science class for all learners.

Reviewer #: 63

Background and experience:

Teacher has 20+ years of experience in K-12 General , TESOL and Special education. Teaching endorsements include ELA, Science and TESOL.

Professional summary of material:

This set of materials offers a unique and engaging approach of teaching middle school science via phenomena. Each phenomenon is examined, peer discussed, modeled, argued and investigated within the lessons. There is a multimedia support approach that includes simulations, videos, slides and websites. Speaking, writing and critical thinking objectives are in every unit.