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	Amplify Science Grade 3 Student Book (6 Pack) Bundle	Publisher	Amplify Education, Inc.
SE ISBN	9781644828267	TE ISBN	979885700269
SW ISBN	9781643330624	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
92%

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
95%

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

The instructional materials allow students to share experiences and cultural backgrounds through discussion activities like "What we think we know". A PDF download called "Eliciting and Leveraging Students' Prior Knowledge, Personal Experiences and Cultural Background" allows teachers to incorporate varied perspectives. Differentiation suggestions are provided for students with diverse backgrounds, such as partner work, graphic organizers, and visual aids.

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 incorporate texts that include ethnic and culturally diverse images and stories of people and places worldwide. They also include multi-media options like live demonstrations, videos, audio texts, and images. However, the materials do not include opportunities to reflect on New Mexico's cultural connections.

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
91%

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

The four instructional units align with NGSS content standards by incorporating real-life phenomena to activate student curiosity and critical thinking skills. Students are given opportunities to investigate through observation, research, hands-on activities, analysis, comparing and contrasting, developing arguments, and reflecting on their learning. Each unit has an end-of-unit project in which the lessons strive to engage students to use their critical thinking skills and knowledge gained from the unit to plan, test, and solve real-world problems according to the engineering design process.

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:

Instructional materials align with the physical science performance expectations using the Engineering Design Process through observations, hands-on activities, modeling, and critical thinking activities. Activities include analyzing different types of forces, including magnetic forces, balanced and unbalanced forces, and chain reactions. Also, the materials include suggestions for students to participate in daily reflections on their learning through writing and drawing.

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 the students with opportunities to analyze patterns by examining parent and offspring traits. They are asked to identify similarities and variations of traits given to offspring by their parents. The resources prompt students to use the explained Science and Engineering Practices to develop a model of a sparrow based on parental traits.

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 instructional materials partially align with the life science performance expectations. The materials align through cause and effect activities such as identifying the environmental effects of traits on offspring. The resources offer ideas to teach how to construct an argument based on their findings. The instructional materials do not align with the disciplinary core idea about animals living in groups and the function of these groups.

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 instructional materials align with the life science performance expectations through inherited traits of parents and offspring. The resource offers lessons for students to evaluate data based on the nonfiction book Handbook of Traits, looking for patterns within the traits of parents and offspring. Another lesson indicates how to identify cause-and-effect relationships with inherited traits using a celery investigation.

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 instructional materials align with life science performance expectations by analyzing and interpreting data, including comparing climates around the world and making observations over time to observe and record changes in data. The materials address cause and effect with an analysis of how climates affect organisms. However, the materials do not align with the disciplinary core idea that fossils are organisms that lived long ago.

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 to earth and space science performance expectations through investigations of patterns to make predictions and observations about the weather. The resource offers ideas of how students can gather data from observations and texts to create tables and graphs and design a structure to withstand a hurricane.

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 align with earth and science performance expectations by having students engage in arguments and support claims with evidence. One lesson shows how to investigate natural hazards and use the design process to develop a structure to reduce the impact of severe weather. The resource also consistently allows examination of how engineers develop technology to meet society's demands and solve real-world problems.

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 engineering design performance expectations by using the design process by researching, communicating with peers about ideas, testing solutions, revising, and reflecting. Students collaboratively examine different claims and evaluate which solutions best solve the problem.

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:

The materials partially align with CCSS ELA standards. They align by having students ask and answer questions, conduct research projects, and present their knowledge. Additionally, they ask students to compare and contrast, write opinion pieces, and reflect on their oral and written learning. However, while students identifying key details is evident in the materials, they are not required to identify the main idea of texts. The materials partially align with the CCSS math standards. The materials align by having students measure, graph, and organize data. Students are also asked to add, subtract, and compare measurements through one and two-step word problems. However, the materials do not have students measure the volume or mass of objects and do not incorporate fractions into mathematical problem-solving.

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
96%

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 present meaningful and interdisciplinary phenomena to focus instruction and assessment in all three dimensions. They also provide guidance on the progression of student learning and the use of assessments.

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 opportunities for both summative and formative assessment throughout the units. Each unit contains a pre-and post-assessment, and formative assessments are available within each lesson. Units also contain opportunities for daily reflection and feedback. The cross-cutting concepts' tracker allows teachers to track student progress on the NGSS.

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

Teacher supports include a supply list for each lesson, differentiation recommendations, a teacher guide with anecdotal notes, a glossary of terms, and suggestions for making home and background connections (Information about NGSS for parents and guardians of 3rd graders). Additionally, the materials provide teacher guidance for administering and giving feedback on assessments.

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

The materials provide teachers with examples and information to incorporate students' prior knowledge and make connections. The materials require students to examine real-life phenomena through investigation and collaborative work. However, the flow of the lessons from one unit to the next is not always present, and there is no information about the sequence of units.

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

The materials give opportunities to extend learning through partner reading, asking questions and offering multiple meanings of words. Differentiation opportunities are present for ELs and students who need support but are limited to reflection opportunities for advanced learners. One extension activity per unit is provided to advanced students with the goal of deepening knowledge of the topic.

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
97%

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 address NGSS, reading, writing, speaking and listening, and math standards. Concepts and skills are spiraled within the units to provide opportunities for repeated practice with the goal of mastery. Within each unit, concepts are built on each other, and previous learning is used in future lessons. Each unit culminates in an end-of-unit project that uses all skills learned within the unit.

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 consistent teaching formats, including opportunities to set a purpose, draw, write, infer, and reflect within each lesson. The materials include authentic texts with pictures, maps, and graphs so students can visually see the materials. Investigation notebooks include an English/Spanish glossary, and teachers are provided background knowledge before beginning the lessons and anecdotal information throughout the lesson. The materials provide teachers with differentiation, and a pre-reading activity is available to activate prior 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:

Resources include materials to support teacher planning and learning, including printable versions of the teacher guides and a recommended time sequence per lesson. The unit map contains information for teachers about how the standards are taught. The materials also provide teachers with recommendations for incorporating student cultural background knowledge into the classroom.

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 embedded assessments like on-the-fly formative assessments with "look for" recommendations and "what now" remediation recommendations. Formative observational assessments can be documented on the cross-cutting concept tracker. Summative assessments include end-of-unit assessments. While various assessment options are available, alternative assessment options for special education, nearing proficient, or advanced learners are not present.

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 provide homework to connect families with school by suggesting school-to-home questions about science content. Differentiation is provided for students through the use of voice-to-text, drawing or written responses, and visual vocabulary cards that can be printed. A multi-language glossary is available to students, and EL assessment modifications are recommended in teacher materials. Lessons are designed with collaborative elements that allow all students to participate in problem-solving investigations.

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

The instructional materials allow students to share experiences and cultural backgrounds through discussion activities like "What we think we know". A PDF download called "Eliciting and Leveraging Students' Prior Knowledge, Personal Experiences and Cultural Background" allows teachers to incorporate varied perspectives. Differentiation suggestions are provided for students with diverse backgrounds, such as partner work, graphic organizers, and visual aids.

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 incorporate texts that include ethnic and culturally diverse images and stories of people and places worldwide. They also include multi-media options like live demonstrations, videos, audio texts, and images. However, the materials do not include opportunities to reflect on New Mexico's cultural connections.

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 #: 13

Background and experience:

I am a 5th grade teacher in New Mexico and I have been in the elementary education field for the last eleven years. I am a Level III educator for the State of New Mexico. I hold an endorsement in social studies. I hold a Bachelor of Arts Degree in History and a Master's Degree in Literacy.

Professional summary of material:

The Amplify Science 3rd grade material is fully aligned with the NGSS. It integrates three-dimensional learning, crosscutting concepts, science and engineering practices, and disciplinary core ideas across a variety of scientific topics. The units are organized around real-world phenomena. It promotes inquiry-based learning through investigations that incorporate the design process. This resource provides teachers support through differentiation guidance, digital components and a focus on collaborative learning. While overall this resource is an excellent choice for educators, there is room for improvement in the area of guidance for advanced and nearing proficient students. While some guidance about modifications to lessons and assessments is available for ELs, there is minimal support for meeting the needs of special education, gifted, or struggling learners.

Reviewer #: 14

Background and experience:

I am an elementary teacher in New Mexico, having just completed my 10th year as a teacher. I have a bachelor's degree in Elementary Education and a Master's of Arts in Education/Administration and Supervision. I hold my level three licensure and am working on my National Board Certification.

Professional summary of material:

The Amplify Science 3rd-grade materials align with the Next Generation Science Standards (NGSS). They effectively cover performance expectations (PEs), disciplinary core ideas (DCIs), science and engineering practices (SEPs), crosscutting concepts (CCCs), and connections (CONNs). Critical evidence points include the following: PEs are addressed through activities and assessments addressing critical scientific concepts and skills; DCIs are addressed through comprehensive content with detailed explanations and hands-on activities; SEPs are met by materials that encourage active learning through scientific practices like modeling and investigation; CCCs are addressed by materials that consistently connect different areas of science through overarching concepts; and CONNs are met through materials that relate science to other disciplines and real-world contexts.

Reviewer #: 15

Background and experience:

I am a level lll licensed teacher with endorsements in the areas of language arts, social studies and TESOL. I am currently the Instructional Support Specialist at an elementary school in rural New Mexico. I have taught grades first through fifth and have 18 years of teaching experience. I hold a Bachelor's Degree in Elementary Education and a Master's Degree in Curriculum and Instruction with an emphasis in Literacy Studies.

Professional summary of material:

The Amplify Science 3rd grade instructional materials are aligned with the NGSS and they also support CCSS language arts and math standards. The instructional materials cover the performance expectations, disciplinary core ideas, science and engineering practices, crosscutting concepts and connections through four units each focusing on their own theme. These four units--Balancing Forces, Environments and Survival, Inheritance and Traits, and Weather and Climate--provide hands-on engaging lessons that build on each other, leading to an end-of-unit project where the materials offer students opportunities to use critical and creative thinking skills. The instructional materials provide paired nonfiction texts that accompany each unit, attempting to engage students in meaningful discussions and conversations to enhancing their learning. The instructional materials provide support for all learners including English learners, advanced students, students below grade level, and culturally and linguistically diverse students.