

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	Amplify Science Grade 2 Student Book (6 Pack) Bundle	Publisher	Amplify Education, Inc.
SE ISBN	9781644828243	TE ISBN	9798885700252
SW ISBN	9781643330617	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

100%

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

96%

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 inform culturally and linguistically responsive pedagogy by affirming students' backgrounds in the materials themselves and in the student discussions, such as student-to-student discourse. The materials provide strategies where students can participate in a productive learning environment, and discussion is key for instruction. There are plenty of partner activities or group work. For example, reading activities are followed by a turn and talk discussion where students share their insights and questions with each other and with the whole class. Through talking and developing a collaborative environment, students begin to feel comfortable asking questions of one another and learning from each other. Additionally, the materials provide opportunities for students to work independently at their own pace when working with the digital interactive notebook, student apps, investigation notebook, and student grade appropriate readers. The instructional materials provide an eliciting and leveraging students' prior knowledge, personal experiences, and cultural backgrounds guide for teachers for each unit. This document includes tools and resources to relate the content area appropriately to diversity in culture and language.

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 instructional materials include tools and resources (student readers, investigations, interactive journals) that demonstrate multiple perspectives in a specific concept and provide quality and supportive materials for teachers so that every student has access to and benefits from deep and engaging science and engineering learning opportunities. The instructional materials address ethnic descriptions, interpretations, and perspectives of events and experiences. Throughout the lessons, there are opportunities to participate by sharing, investigating, writing, thinking, and discourse to provide personal experiences and to explain events/perspectives on the given concept or topic. The materials offer an insight on different parts of the world that can, in turn, provide awareness of different backgrounds and opportunities to observe the world from inside the classroom.

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
100%

OVERALL ALIGNMENT

Materials align with the science standards overall.

Statements of appraisal and supporting evidence:

The instructional materials align with the standards and foster the students' abilities to meet all grade-level performance expectations and second grade science standards through a three-dimensional instructional sequence. The instructional materials are designed and sequenced to build on the students' expertise and prior knowledge with the grade-level disciplinary core ideas (DCIs), science and engineering practices (SEPs) and crosscutting concepts (CCCs). The materials connect previous knowledge and experiences to the new concepts.

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 instructional materials align with the physical science performance expectations and related components for Matter and its Interactions. The unit on Properties of Materials covers all of the science standards under Matter and its Interactions. Throughout the unit, the materials provide investigations on finding the correct solutions to create the best recipe for glue using dry and wet materials. The materials also include the three states of matter and how different interactions with temperature and water can change their property. The materials include grade appropriate text, lesson interactive slides, on demand videos, interactive notebook, and many other resources on the content.

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 align with the physical science performance expectations and related components for ecosystems and their interactions, energy, and dynamics. The unit on Plants and Animal Relations covers all of the science standards under Ecosystems. Throughout the unit, the materials provide investigations on how plants depend on animals in their habitats. The materials also include first hand experiences, informational text, and a clear focus on how to plan and carry out investigations about plant needs. The materials provide grade appropriate text that supports students' understanding on how landforms change over time due to water and wind. The materials include grade appropriate text, lesson interactive slides, on demand videos, interactive notebook, and many resources on the content.

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 the physical science performance expectations and related components for Biological Evolution: Unity and Diversity. The unit on Plants and Animal Relations covers all of the science standards under Biological Evolution. The materials provide a grade appropriate text that supports students' understanding of the unique plants and animals that live in each habitat. The materials also include first hand experiences, informational text, and a focus on how to plan and carry out investigations about habitats around the world. These materials provide informational text on animal habitats and an interactive notebook where students can investigate a new habitat. The material provides learners an opportunity to understand the similarities and differences between living things in various areas. The materials offer relevant references to the food chain and the life cycle.

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 instructional materials align with the physical science performance expectations and related components for Earth's Place in the Universe. The unit on Changing Landforms covers all of the science standards under Earth's Place in the Universe. The materials provide models to investigate how wind and water can cause changes to landforms. The materials also provide an insight on geography and introduce and model how to find information using maps. The material includes informational text on natural phenomena and introduces how events can be caused by water and can happen quickly or slowly over time. The material makes references to historic events that are correlated to science concepts such as volcanoes, island formations, and mountains. The materials also include first hand experiences, informational text, and a focus on how to plan and carry out investigations about landforms. The material also includes handy digital graphing tools for student use.

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 instructional materials align with the physical science performance expectations and related components for Earth's Systems. The instructional materials include a unit on Changing Landforms that covers all of the science standards under Earth's Systems. The material provides information on how wind and water may affect the shape of the land, sometimes causing erosion. The materials include a student investigation notebook with questions about landforms and erosion as well as student investigation on sand and landforms. The instructional materials provide opportunities for students to observe evidence of erosion through models, photos, and maps.

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 instructional materials align with the physical science performance expectations and related components for Engineering Design. The unit on Properties of Materials covers all of the science standards under Engineering Design. The materials explain how engineers work by asking questions, making observations, and gathering information. The materials provide students with problem-solving opportunities so they can work like glue engineers. The materials provide information on properties of substances and mixtures. The materials provide opportunities for students to investigate, inquire, make observations, and test student created glues. The materials provide lessons and guidance for students to graph data and analyze/interpret results on their glue investigation.

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 instructional materials align with the CCSS for English language arts as they relate to reading and writing informational text. The investigations relate cause and effect relationships and provide opportunities for language, writing, and reading on the given topics. The instructional materials align with the CCSS for math practices and include counting, adding, subtracting, graphing, word problems, and comparing numbers.

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.

The instructional materials provide an overview for each unit that includes the 3D statements explaining the unit target, 3D learning objectives, and how they apply in each unit and lesson. The materials provide integrated hands-on activities and teacher guided instruction, including project and modeling of different activities. The instructional materials provide appropriate resources to support students in becoming successful in the provided investigation opportunities. The materials provide opportunities for students to apply what they learn by developing models and constructing explanations to communicate their ideas on the natural phenomena.

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 provide teachers with actionable and diagnostic information about student progress toward the three-dimensional learning goals for the unit, the grade, and the grade band. Assessments give opportunities to educators to monitor student progress in all three-dimensional standards and provide differentiation strategies for all types of learners. Three-dimensional assessments are grounded in the unit's Progress Build, which describes the way understanding of the unit content should develop and deepen through engagement with continued learning experiences. The materials provide a wide variety of assessments that include oral and physical responses as well as formative and summative assessments.

FOCUS AREA 3: TEACHER SUPPORTS

Materials include opportunities for teachers to effectively plan and utilize materials.

The instructional materials provide teachers with content that includes opportunities to effectively plan and utilize materials. The materials provide a unit overview with a wide variety of teacher supports that are easy to access and well organized. The unit overview explains what is in the unit and how to give helpful insight into the specific topic of the unit. It also includes all the lessons in the unit, classroom management suggestions, technology opportunities, activity extensions, literacy supports, differentiation strategies, multiple opportunities for assessments, and instructional suggestions. Each lesson provides a printable and online lesson guide with detailed information on the lesson.

FOCUS AREA 4: STUDENT CENTERED INSTRUCTION

Materials are designed for each student's regular and active participation in science content.

The instructional materials are centered around student engagement. The materials provide opportunities to engage students' curiosity and participate from their prior knowledge and connects their learning to relevant phenomena and problems. There are opportunities to develop an understanding of their ideas and experiences based on each topic. The materials provide the flow of lessons through the Progress Build tab, which describes the way in which students' explanations of the central phenomenon should develop and deepen over the course of a unit to sustain student engagement. The materials provide opportunities to investigate, present, and reflect their designs and student work.

FOCUS AREA 5: EQUITY

Materials are designed for all learners.

The instructional materials and assessments are designed in an accessible and flexible manner allowing choice by students. The lessons provide various means of engagement, representation, action, and assessment. The materials also include ways for all students to build and reflect on science knowledge, access all the content, and engage in self-reflection. The materials exemplify the understanding that each student is unique, and provides differentiation strategies in each lesson to provide extensions and opportunities for all students to engage in learning. The materials provide a Universal Design for Learning guide that gives teacher strategies and information. Additionally, digital resources of the materials allow all students to record their voices, use text features, and create models and sketches to support writing, listening, and speaking standards.

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

99%

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 instructional materials address the students' abilities to meet all grade-level performance expectations and second grade standards through a three-dimensional instructional sequence. The instructional materials are designed and sequenced to build on the students' expertise with the grade-level disciplinary core ideas (DCIs), science and engineering practices (SEPs) and crosscutting concepts (CCCs). The instructional materials provide multiple activities and assessments that support the mastery of each standard. The units are designed to address the performance expectations for second grade. The units allow students to build knowledge across disciplines that build on each other.

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 provide a teacher edition that presents the learning progressions of the scope and sequence of skills and concepts in the unit overview. Each unit has an overview that explains the purpose, progression, and learning expectations of the lessons. Each lesson has a guide that explains the progression between the activities in the lesson. There is one unit that is about investigation, one about modeling, and one on design. The design of the assignments shows a purposeful sequencing of teaching and learning expectations. The instructional materials focus on students repeatedly planning, designing, and testing solutions to a problem.

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 teachers with a variety of resources that support teacher planning, student learning, and student understanding of the NM content standards. The instructional materials provide a clear and concise list of lessons in the teacher's edition that clearly states what standards are covered in the unit (Standards at a Glance) and each lesson has an estimated time of instructional delivery for each component of the unit. The instructional materials provide slides for each lesson. The lesson slides have annotations to support the teacher with instructional strategies to help guide student academic development. The annotations include lesson purpose, suggested teacher talk, teacher actions, on-the-fly assessment, and student possible responses. The instructional materials support teachers with differentiation strategies and an assortment of instructional supports and resources in each unit, lesson, and individual activity level to meet the needs of students and help guide academic development throughout the lessons.

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 a variety of assessments that measure all student progress with alignment in instruction to focused, meaningful, and standards-based learning goals through the use of instructionally embedded, multi-modal assessment opportunities and carefully sequenced progress builds. The instructional material ensures that every student is achieving the level of understanding required by each unit and preparedness for the next lesson. The materials include an assessment chart that includes the standard, the element, and the assessment opportunities, and what lesson they can be found in with a description of each assessment. The teacher edition includes an assessment system section that describes what each formative and summative assessment provides, how it aligns to each standard and lesson, and how it can be modified to meet the needs of all students.

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 are embedded with support for diverse learners. The units are designed to meet the needs of different student populations with diverse learners in mind. The instructional material provides rigorous yet accessible science instruction for all students. Each lesson is planned to provide various entry points for students, and to enable all students to be successful with all of the activities. The lessons, activities, and assessments can be customized or adapted as needed. The instructional materials provide a differentiation section in each lesson that supports teachers by providing embedded supports for diverse learners. This resource lists strategies to meet the needs of different student populations.

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 inform culturally and linguistically responsive pedagogy by affirming students' backgrounds in the materials themselves and in the student discussions, such as student-to-student discourse. The materials provide strategies where students can participate in a productive learning environment, and discussion is key for instruction. There are plenty of partner activities or group work. For example, reading activities are followed by a turn and talk discussion where students share their insights and questions with each other and with the whole class. Through talking and developing a collaborative environment, students begin to feel comfortable asking questions of one another and learning from each other. Additionally, the materials provide opportunities for students to work independently at their own pace when working with the digital interactive notebook, student apps, investigation notebook, and student grade appropriate readers. The instructional materials provide an eliciting and leveraging students' prior knowledge, personal experiences, and cultural backgrounds guide for teachers for each unit. This document includes tools and resources to relate the content area appropriately to diversity in culture and language.

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 instructional materials include tools and resources (student readers, investigations, interactive journals) that demonstrate multiple perspectives in a specific concept and provide quality and supportive materials for teachers so that every student has access to and benefits from deep and engaging science and engineering learning opportunities. The instructional materials address ethnic descriptions, interpretations, and perspectives of events and experiences. Throughout the lessons, there are opportunities to participate by sharing, investigating, writing, thinking, and discourse to provide personal experiences and to explain events/perspectives on the given concept or topic. The materials offer an insight on different parts of the world that can, in turn, provide awareness of different backgrounds and opportunities to observe the world from inside the classroom.

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 #: 10

Background and experience:

I am a teacher of 13 years in a 1st and 2nd grade dual language education classroom. I hold a level III A Instructional Leader K-8 elementary license with endorsements in Modern and Classical Native Languages, Bilingual Education, and TESOL. I have a bachelor's degree in Elementary Education K-8 from the University of New Mexico and a Master's Degree in Curriculum and Instruction from Western Governor University.

Professional summary of material:

Amplify Science instructional materials provide teachers and students with great resources to teach and learn the New Mexico content standards. The standards from NGSS are evident throughout the units in a variety of student investigations and student activities. The materials provide a coherent balance of science, reading, writing, speaking and listening, and math content standards. The materials provide well designed lessons that take into account effective lesson structure and pacing. The lessons build upon students' background knowledge to lay a foundation to achieve proficiency in the science standards addressed for the second grade level. The instructional materials provide teacher resources that support planning, learning, and understanding of the New Mexico content standards. The teacher edition materials provide a list of lessons with a wide variety of resources accessible for each lesson. The online lessons are easy to navigate and the option to print them is also available. A variety of assessments that measure learning progression of students is also available, with differentiation strategies to meet the needs of all students. The materials inform culturally and linguistically responsive pedagogy by affirming students' backgrounds in the materials and in the student discussions. The instructional materials include tools and resources to relate the content area appropriately to diversity in culture and language. Overall, the materials are high-quality and recommended.

Reviewer #: 11

Background and experience:

I have been an educator for 17 years and I have taught multiple grade levels. I currently teach third grade and I am a dual language teacher, teaching the Spanish portion. I am the lead science content teacher at my school, and I hold an annual school wide science fair for Pre-K through 5th grade. I have a K-8 teaching license with a Bilingual Endorsement. I also have a Master's in Instructional Leadership and my Administrative License for the State of New Mexico. I have had the pleasure of attending professional development on the NGSS Science Content Standards, Making Sense of Science, and PBL (Project Based Learning).

Professional summary of material:

My professional summary of the instructional materials I have reviewed is that this material has an emphasis and focus on instruction embedded with student active engagement and critical thinking. The instructional materials allow teachers to teach students to think like scientists and engineers while integrating the scientific principles and supporting student learning of concepts in all science domains. The instructional materials promote student learning experiences, and assessments are integrated in the units. The instructional materials allow students to build an understanding through engagement with science and engineering practices. In these materials, students are encouraged to investigate through engagement, use prior knowledge, collect and make sense of data, and reflect on findings. The units and lessons build upon one another, and provide students with various opportunities to take what they have learned and apply it to the new unit, lesson, or student activity.

Reviewer #: Reviewer 12

Background and experience:

I have been an educator for the last 13 years. Academically, I have a Bachelor's degree in Computer Informatics and a Master's degree in Elementary Education. My teaching license in New Mexico has two endorsements, one in Bilingual Education and the other endorsement in Teaching English to Speakers of Other Languages. Currently, I am a second grade teacher in a bilingual school in my district. My experience in the classroom extends to teaching first, second, fourth, and fifth grade. I have attended multiple conferences and trainings related to the NGSS, Integration of Math and Science in the classroom, and professional learning courses that are focused on Science. My extensive experience teaching other grade levels and learning new ways to teach different subject areas has prepared me to look at teaching curriculum with a critical eye. Lastly, this is my third year working as a reviewer for the New Mexico Public Education Department; this job allows me to know more about all the aspects behind teaching materials and the needs of my students.

Professional summary of material:

The teaching materials include a wide range of teaching resources and tools that can accommodate all types of learners in the classroom. The materials engage students to work in different group settings; it adapts to different learning styles; and it meets the needs of students to learn the necessary science standards for their grade level. These teaching materials offer multiple opportunities for students to collaborate and investigate within the clear objectives in each unit and lesson. Additionally, each lesson is designed to evolve in the continuous flow of learning that builds a solid and strong understanding of science, math and engineering skills. I recommend this material as a result of the criteria that were met by the materials during the review process.