

2018 Instructional Material Summer Review Institute
Grade K-12: Science Instructional Material
Review Team Appraisal of Title – K-12 Science Education

This information is provided for local school boards and governing authorities of charter schools to consider in their selection process to meet the needs of their student population.

Text Title:	<u>Amplify Science Grade K</u>	Publisher:	<u>Amplify Education</u>
Course:	<u>Science</u>	Grade Level:	<u>Kindergarten</u>
SE ISBN:	<u>9781642761412</u>	TE ISBN:	<u>9781642761412</u>
SW ISBN:	<u>9781643330594</u>		

SECTION 1 – NM Content Standards, Benchmarks and Performance Standards

Reviewer # and Section 1 Total: #13 TOTAL 98% # 14 TOTAL 97% #15 TOTAL 97%
Average Score: 97%

Review Team Assessment of material’s compliance with Section 1:

This curriculum truly embraces the Kindergarteners as scientists. “We have been working as scientists” sentiment is echoed throughout the language and materials from the vocabulary to safety instructions. The teacher resources sections especially, Getting Ready to Teach and Progressions are thoughtful and terrific resources for teachers. Some other highlights include:

- Citations reached high level of Bloom’s
- Activities were hands-on and creative
- All standards were met
- SEPs and CCCs were excellent
- Home investigations

SECTION 2 Publisher’s Criteria

Reviewer # and Section 2 Total: #13 TOTAL 92% #14 TOTAL 92% #15 TOTAL 92%
Average Score: 92%

Review Team Assessment of material’s compliance with Section 2:

- Disciplinary literacy, learning progressions, usability, scaffolding are all strong
- Digital library for students was culturally diverse
- Differentiated instruction was very apparent from gifted through ELL students
- Exemplars need to be addressed
- Teacher rubrics for assessing are included. Child friendly rubrics would be a good addition.

Reviewer Comments

Reviewer #: 13 Reviewer Background: 24 years teaching with bilingual endorsement
Comments: The curriculum very clearly aligned with the standards in all areas. All of the strategies helped with classroom management and was open to critical thinking. The gifted and ELL strategies will be very useful...gifted not apparent in other curriculums.

Reviewer #: 14 Reviewer Background: 23 years classroom teaching K-3 and special education

Comments: Kindergarten curriculum is impressive. Use of phenomena, whisper vocab, think and walk, assessment conversations that are 1:1 all great examples of how developmentally appropriate this curriculum is for K.

Reviewer #: 15 Reviewer Background: Kinder/1st/2nd grade 5 years teaching

Comments: Overall, the curriculum was impressive. Curriculum was aligned to the standards in all areas. The vocabulary instruction, assessment conversations and differentiated instruction was amazing.

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Text Title:	<u>Amplify Science Grade 1</u>	Publisher:	<u>Amplify Education</u>
Course:	<u>Science</u>	Grade Level:	<u>1</u>
SE ISBN:	<u>9781642761511</u>	TE ISBN:	<u>9781642761511</u>
SW ISBN:	<u>9781643330600</u>		

SECTION 1 – NM Content Standards, Benchmarks and Performance Standards

Reviewer # and Section 1 Total: #28 TOTAL 100 #29 TOTAL 100 #30 TOTAL 100
Average Score: 100

Review Team Assessment of material’s compliance with Section 1:
All NGSS standards for grade 1 were met. CCSS Math and ELA were noted for all lessons. There is an abundance of resources and support. Videos and other media are age appropriate and visually diverse for the age. Curriculum was rigorous. Students were given ample opportunities to review, recall, and reflect on knowledge. There are small libraries for each chapter that includes engaging information to reinforce concepts learned. Materials are coherent, and sequenced across units to build depth of knowledge. Materials are investigation driven. Opportunity for differentiated instruction is provided. Teacher support material is detailed and in depth to support lesson planning and learning progressions for all learners.

SECTION 2 Publisher’s Criteria

Reviewer # and Section 2 Total: 1. #28 TOTAL 100 2. #29 TOTAL 100 3. #29 TOTAL 100
Average Score: 100

Review Team Assessment of material’s compliance with Section 2:
There were abundant opportunities for student investigation and speaking and writing about science. Materials provide a sequence of coherent authentic science sources that build scientific vocabulary and knowledge. Usability of materials was appropriate for the grade level and offers opportunity for authentic assessments. Support materials and teacher materials offer multiple levels of scaffolding for low level and advanced students.

Reviewer Comments

Reviewer #: 28 Reviewer Background: 9 years Comments: A few standards were met through “going further” section, so teachers must do these to cover all standards.

Reviewer #: 29 Reviewer Background: 11 years Comments: This curriculum allows students to be “little scientists.”

Reviewer #: 30 Reviewer Background: 23 years Comments: Usability requires computer and web navigation skills.

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This information is provided for local school boards and governing authorities of charter schools to consider in their selection process to meet the needs of their student population.

Text Title:	<u>Amplify Science Grade 2</u>	Publisher:	<u>Amplify Education</u>
Course:	<u>Science</u>	Grade Level:	<u>2</u>
SE ISBN:	<u>9781642761634</u>	TE ISBN:	<u>9781642761634</u>
SW ISBN:	<u>9781643330617</u>		

SECTION 1 – NM Content Standards, Benchmarks and Performance Standards

Reviewer # and Section 1 Total: #4 TOTAL 98.8% #5 TOTAL 98.8% #6 TOTAL 90.0%
Average Score: 95.9%

Review Team Assessment of material’s compliance with Section 1:

This curriculum covers three main content titles, “Plants and Animal Relationships,” “Properties of Materials,” and “Changing Landforms.” Engaging investigations are presented through teacher led discussions, but seemed to be based on lower levels of Bloom’s Taxonomy and limit students to demonstrate critical thinking. Investigation notebooks provide a sequenced and secure repository for student work that can also indicate any missing or incomplete student work. Vocabulary is introduced in context during lessons, and kits include a Vocabulary wall header and vocabulary cards for classroom display. Safety guidelines appear at the front of the investigation notebooks. These should also occur as a repeat in the text when necessary. The teacher guide (print) was rather unwieldy and would benefit from being broken down into unit editions. Although this is mainly a digitally based program, it can be accessed through print materials for districts with limited technology. On the digital format, students are able to enter data into graphs and tables. Most of the individual activities are listed as taking less than 30 minutes.

The various student reader books are grade level appropriate and contain high level interest topics such as “seeds,” “ingredients of foods,” and “landforms.” Within these readers, vocabulary words are bolded, contain a glossary and have a variety of pictures. Within the Student Workbook there are a variety of tasks that students are expected to do. For example, some are drawing, label, writing, drawing graphs, and fill-in data charts. Despite having a variety of given tasks, the questioning and verbs used in the task have limited rigor for students to advance their critical thinking. Throughout the curriculum, Differentiated Instruction support is provided for students with disabilities, advanced or gifted learners, EL learners and girls or young women. This differentiation is provided for each individual lesson for the teacher to access.

SECTION 2 Publisher’s Criteria

Reviewer # and Section 2 Total: #4 TOTAL 96.2% #5 TOTAL 96.2% #6 TOTAL 96.2%
Average Score: 96.2%

Review Team Assessment of material’s compliance with Section 2:

This curriculum is viable for the school year and contains various high interest topics that are grade level appropriate for second grade. These topics relate to animals and plants, understanding what materials are made of and how materials benefit a specific use, and then various landforms. The teacher has the option of deciding which order to teach the three units. Learning progressions are given for the indicated grade level, but did not extend to other grade bands. A multi-language glossary is included with the units and included languages like Arabic, Chinese, and French, but not Spanish. Materials provided in the kits are sufficient for two classes of 36 students. Some additional materials are required, but are easily obtained. The teacher has various opportunities for both formative and summative assessments. The teacher can use the “On the Fly Assessments” to obtain a quick snapshot of student learning and understanding of concepts. Under each

lesson, brief Materials and preparations, digital resources, vocabulary, differentiation, and standards are listed for the teacher. Each lesson includes possible responses and teacher support materials, as well as an area for the teacher to enter their own notes and reflections on the lesson. Technology is used in the curriculum.

Reviewer Comments

Reviewer #: 4 Reviewer Background: 17 years of experience, in 2nd-5th grade

Comments: Each unit is focused on students solving one real life problem and all of the activities work towards solving that problem. This can lead students to a rich discussion and deep understanding of one particular problem, but may limit students to just one problem instead of multiple related phenomena.

Reviewer #: 5 Reviewer Background: 25 years of experience, in 1st-5th grade

Comments: Many of the lessons seem to rest on teacher led discussions, although students were encouraged to “pair and share.” Although most of the program can be accessed through print materials, it is really a digitally based program.

Reviewer #: 6 Reviewer Background: 7 years of experience, in 4th grade

Comments: In this curriculum, there are a variety of questioning opportunities provided by the teacher, however for students there is limited higher level critical thinking opportunities for students to engage in. Many of the tasks students are asked to preform are barely reaching level 2 of Bloom’s Taxonomy. The provided student readers have engaging topics and phenomena.

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Text Title:	<u>Amplify Science Grade 3</u>	Publisher:	<u>Amplify Education</u>
Course:	<u>Science</u>	Grade Level:	<u>3</u>
SE ISBN:	<u>9781642761757</u>	TE ISBN:	<u>9781642761757</u>
SW ISBN:	<u>9781643330624</u>		

SECTION 1 – NM Content Standards, Benchmarks and Performance Standards

Reviewer # and Section 1 Total: 1. # 7 TOTAL 91.42 2. # 8 TOTAL 95.9% 3. # 9 TOTAL 94.2%
Average Score: 93.84%

Review Team Assessment of material’s compliance with Section 1:
The program met all four language domains of reading, writing, listening and speaking about scientific phenomena and engineering solutions. Research shows that when all four domains are incorporated into lessons, students potentially learn more.
Rich in academic vocabulary and materials also provided a coherent sequence and is not taught in isolation.
The SEP’s and CCC’s met the highest levels of Bloom’s Taxonomy based on scoring rubric.
The text sets were rich in support of the concepts and they were also engaging and concise. Illustrations and diagrams provided students with quantitative information.
All performance expectations and NGSS were clear, concise and effectively incorporated into the program.
The embedded technology was engaging, user friendly and supports student learning.

SECTION 2 Publisher’s Criteria

Reviewer # and Section 2 Total: 1. # 7 TOTAL 100% 2. # 8 TOTAL 100% 3. # 9 TOTAL 100%
Average Score: 100%

Review Team Assessment of material’s compliance with Section 2:
The teacher resources, including scoring guidelines, were available for all lessons and there was also evidence of scaffolding and student support throughout the lessons. The assessment piece was also evident, they included teacher rubrics and student rubrics with some exemplars noted in many lessons. The materials provided a variety of cultural perspectives within the lessons. Connections to writing and analyzing data is evident in each lesson. The embedded use of technology is abundant and highly engaging for students. Numerous student assessments and opportunities for collection of student data is available throughout each lesson. Scaffolding of lessons and practices are coherent and support student mastery of the standards. Supports are included for all levels of student learning, and include ELL pieces throughout.

Reviewer Comments

Reviewer #: 7 Reviewer Background: Reviewer has 11 years of teaching and seven of those years has been teaching science integrated with math and LA in a dual language setting.
Comments: Reviewer found that the presented materials were well aligned with the standards and the Lexile level was appropriately leveled for third grade.
Reviewer #: 8 Reviewer Background: Reviewer has 6 years teaching 3rd grade.
Comments: The materials reviewed for this grade band were impressive in many aspects. I found it to be rich in NGSS support, with academic vocabulary support in depth and highly defined.

Reviewer #: 9 Reviewer Background: Reviewer 9 has been teaching for 10 years at the Elementary level. Reviewer is involved with many science initiatives within school district. Reviewer is also part of ISEC teacher cadre for the last 4 years. Comments: The program was highly effective and aligned well with the NGSS. All four language domains (reading, writing, listening, and speaking) were consistently embedded into all units and lessons, allowing for the SEPs and CCCs to meet the highest level of Blooms Taxonomy scoring rubric. There were many opportunities for student engagement and reaching their highest potential of learning and knowledge.

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Text Title:	<u>Amplify Science Grade 4</u>	Publisher:	<u>Amplify Education</u>
Course:	<u>Science</u>	Grade Level:	<u>4</u>
SE ISBN:	<u>9781642761917</u>	TE ISBN:	<u>9781642761917</u>
SW ISBN:	<u>9781643330631</u>		

SECTION 1 – NM Content Standards, Benchmarks and Performance Standards

Reviewer # and Section 1 Total: 1. #10 TOTAL 91% 2. #11 TOTAL 92% 3. #12 TOTAL 90%
Average Score: 91%

Review Team Assessment of material’s compliance with Section 1:
Overall, these materials meet all of the NM STEM Ready standards. There is a good balance of Bloom’s Taxonomy with a majority of work falling in understanding and applying. These materials are very technology based. Students and the teacher will need access to multiple devices, with a preferred one to one ratio. It covers the DCIs, SEPs and CCCs. Online simulations provide students with opportunities to manipulate different factors when exploring phenomena. There are many opportunities for students to share with each other throughout the entire investigation. Students are given opportunities to problem solve using technology skills. The progression of the units provides scaffolding for the standards to ensure optimal student success. Students are given opportunities to look for and identify patterns found naturally in the world. Students are generating their own data regularly to serve as evidence or explanations of phenomenon. Much learning takes place through online simulations, student reading, and teacher demonstration, with student writing serving as evidence of concepts mastered. Students have a variety of texts to support their learning.

SECTION 2 Publisher’s Criteria

Reviewer # and Section 2 Total: 1. #10 TOTAL 89% 2. #11 TOTAL 81% 3. #12 TOTAL 93%
Average Score: 88%

Review Team Assessment of material’s compliance with Section 2:
These materials offer a variety of benefits and meet many criteria. Amplify Science is multidisciplinary, integrating student reading and writing into science learning and covering some math. It also progresses nicely, offered scaffolding, ELL strategies and many different types of assessments. There are opportunities for students to explore and investigate the various Science standards. This curriculum model really addressed diversity and brought many perspectives.

Reviewer Comments

Reviewer #: 10 Reviewer Background: Level III Elementary teacher with 13 years of experience in grades K-4.
Comments: What I liked most about this curriculum was the integration of different cultures and regions throughout the world. There were multiple opportunities for students to work together with technology and share problems, solutions, and outcomes with one another. Students reflected regularly through writing at the end of each unit.

Reviewer #: 11 Reviewer Background: Level III Elementary teacher of 18 years with a Master’s in Education. Have taught 1st – 5th grade and gifted education (elementary level).
Comments: This curriculum involves a lot of writing. The hands-on component was lacking in my opinion. I wouldn’t prefer to use this as I think student engagement might be lost with the lack of actual experiments.

Reviewer #: 12 Reviewer Background: Level II Elementary Teacher with 20 years in the classroom. I have taught 3-5 grades and technology, grades k-5.

Comments: Amplify Science has a strong technology component, with engaging student simulations and explorations. It will work well for teachers who like to integrate their science into their ELA block, as it offers multiple student reading books and writing opportunities, with strong literacy supports built in to the teachers' guide. The online teachers' guide is intimidating at first, but becomes clearer with a little use. Professional guidance for teachers may be necessary to familiarize them with the online program.

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Text Title:	<u>Amplify Science Grade 5</u>	Publisher:	<u>Amplify Education</u>
Course:	<u>Science</u>	Grade Level:	<u>5</u>
SE ISBN:	<u>9781642762075</u>	TE ISBN:	<u>9781642762075</u>
SW ISBN:	<u>9781643330648</u>		

SECTION 1 – NM Content Standards, Benchmarks and Performance Standards

Reviewer # and Section 1 Total: #16 TOTAL 99.49 #17 TOTAL 98.97 #18 TOTAL 98.53
Average Score: 98.99

Review Team Assessment of material’s compliance with Section 1:

- The curriculum aligns with NGSS.
- The teacher guide was amazingly in-depth and provided great support.
- Activities were engaging and allowed for many ways to show mastery of content.
- Curriculum was user friendly.
- Engaging hands-on activity and follow-up discussion, students consolidate and communicate their understanding of the idea
- Highly-engaging, phenomena-based curriculum that integrates the latest practices in science teaching and learning
- Reading the case study helps students connect what they are learning to another real-world situation.
- Students are writing scientific arguments just like real scientists and engineers.
- The interactive digital resources/tools are easy to use (e.g easy access to resources like projections and word charts)

SECTION 2 Publisher’s Criteria

Reviewer # and Section 2 Total: #16 TOTAL 100 #17 TOTAL 100 #18 TOTAL 96.3
Average Score: 98.77

Review Team Assessment of material’s compliance with Section 2:

- Students were provided opportunities to regularly engage in speaking and writing.
- Embedded supports for diverse learners
- Specific differentiation strategies for English Learners, those who need more challenge, and support
- NGSS standards, Common Core ELA and Math are embedded in the lesson all throughout the teacher’s guide.

Reviewer Comments

Reviewer #: 16 Reviewer Background: 19 years as an educator. I have taught at several different levels.
Comments: The most complete curriculum I have ever seen.

Reviewer #: 17 Reviewer Background: 16 years of teaching Science (6-12)
Comments: The curriculum is highly engaging, phenomena-based that integrates the latest practices in science teaching and learning. Case studies are included in each lesson to help students connect what they are learning to another real-world situation.

Reviewer #: 18 Reviewer Background: 15 years teaching

Comments: I was very impressed with the materials. It had it all; content, standards, vocabulary, many hands-on learning activities, very student-centered. The only drawback would be the lack of math, but even with that, there was enough to start them on scientific thinking. Must have in any classroom.

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Text Title:	<u>Earth and Space Science</u>	Publisher:	<u>Amplify Education</u>
Course:	<u>Science</u>	Grade Level:	<u>6-8</u>
SE ISBN:	<u>9781642763522</u>	TE ISBN:	<u>9781642763546</u>
SW ISBN:	<u>9781642762259</u>		

SECTION 1 – NM Content Standards, Benchmarks and Performance Standards

Reviewer # and Section 1 Total: #22 TOTAL 95.7% #23 TOTAL 96.3% #24 TOTAL 96.4%
Average Score: 96.1%

Review Team Assessment of material’s compliance with Section 1:

Amplify’s curriculum truly encompasses the 3-D approach to teaching and learning. The DCI’s, CCC’s and SEP’s are interconnected in a way that is designed to raise the level of mastery of the NGSS. Evidence of this is seen in the Unit Overviews, and the Global Link provided for *New Mexico*. One of the excellent components is the modeling tool. It allows students to go through computer simulations involving real world problems, and demonstrate how they have mastered a concept. Students are the center of the learning process and are always engaging in hands-on science, not only by creating models physically, but also digitally. The engineering internships are phenomenal, affording students the opportunity to solve real world, global issues, evaluate past solutions, and build on evidence provided throughout history. This gives students an understanding of what real life applications of what they are learning in the classroom will look like. The dossiers at the beginning of the “Internships,” set up the scenario for students, and they can directly see how what they are designing for the “Internship,” could potentially be a solution that could be tabled by Scientists in the real world, in real time. Embedded within all units are student Socratic seminar opportunities, where students discuss their claims and use viable evidence to support their arguments. The design process is ongoing, allowing students to test their hypotheses multiple times along with opportunities to revise their concluded findings. Students share their work with others, as well as evaluate other’s solutions, supporting a high level of student-centered collaboration, and higher order thinking. The teacher is present as a facilitator and a guide to keep the process on-track, while constantly checking for different levels of understanding. The teacher guide gives potential solutions for those who are struggling, at “grade level,” or, are advanced in their thinking and application of content.

SECTION 2 Publisher’s Criteria

Reviewer # and Section 2 Total: 1. #22 TOTAL 100% 2. #23 TOTAL 100% 3. #24 TOTAL 100%
Average Score: 100%

Review Team Assessment of material’s compliance with Section 2:

Amplify, is one of the most comprehensive programs affording any level of teacher, with any student population, multiple ways to facilitate teaching and learning. It is extremely versed in Equity, using real representations of different types of scientists of all genders, ages, and ethnicities, who are addressing 21st century global issues. The differentiation of curriculum allows for ALL students to have a deep understanding of the content under study. Multiple modalities are used in every unit, to support all learning styles, and keep students engaged and forward thinking. EL students are provided with rich graphic representations, videos, and multiple contexts of content and workforce vocabulary. Evidence of this is seen in the “Internship Units,” the, “Simulators,” and the “Library.” *Amplify*, embeds both computational and CCSS Math Practices. This is highlighted in the analyzation of graphs, calculations of temperatures regarding climate (and others), while using the calculations to support viable arguments, and demonstrating knowledge of patterns, and/or repeated reasoning. A highlight

is the homework, encouraging academic discourse at home, which is shown to improve content comprehension. The materials found in *Amplify's* programs, are all vertically aligned to enrich the previous year's learning, and prepare students for future grade levels and college or a career. No task in the units is frivolous, or redundant.

Reviewer Comments

Reviewer #: 22 Reviewer Background: 6th gr Earth Science, 7 years teaching experience, BS in Biology w/ emphasis in zoology, MA in Elementary Education

Comments: The "Engineering Internship" units in the *Amplify* afford students the opportunity to become engineers and tackle real-world issues. *Amplify* also is truly an evidence-based science curriculum and created by a university science department. Preconceptions about climate changed are noted as such, thus the curriculum is free of political "cherry-picked" ideas

Reviewer #: 23 Reviewer Background: 7th gr. Life Science, 10 years teaching experience in the US, BSEED major in Gen. Science, minor in Social Studies, MA in Special Ed, Level III

Comments: I like the Simulation tools which help students explore connections of concepts in order to support their claims. Videos are accompanied with captions that are informative for students gather evidence to answer investigation questions. Truly, *Amplify* is easy to access for teachers and students.

Reviewer #: 24 Reviewer Background: K-8 Level II, Sixth Grade Science teacher, endorsements in Psychology and Agriculture. Level III pending/Middle Level Science Pending. Eight years of teaching experience.

Comments: The "Internship Units" encourage students to really become Scientists who have to solve real world problems, as if they are in the workplace. The differentiation opportunities allow for multiple learning styles, flexible student grouping, and an organic process which drives students to evolve in their comprehension in a truly three-dimensional manner.

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Text Title:	<u>Life Science</u>	Publisher:	<u>Amplify Education</u>
Course:	<u>Science</u>	Grade Level:	<u>6-8</u>
SE ISBN:	<u>9781642763577</u>	TE ISBN:	<u>9781642763591</u>
SW ISBN:	<u>9781642762624</u>		

SECTION 1 – NM Content Standards, Benchmarks and Performance Standards

Reviewer # and Section 1 Total: #19 TOTAL 99.36% #20 TOTAL 94.16% #21 TOTAL 98.5%
Average Score: 96.67%

Review Team Assessment of material’s compliance with Section 1:
We would highly recommend this curriculum with a few important side notes. This curriculum has some core components that are part of the digital format so teachers might need some professional development and tech support to start navigating and using the resources. Maneuvering through the digital resource is not easy at first, but after the system is familiar, it becomes a very powerful resource. We recommend the curriculum for an experienced teacher who knows the content and is familiar with the 3 dimensionality and the PE, DCI, CCC, and SEPs that are at the heart of NGSS. The Lessons and activities within this curriculum are rich with rigor, scientific thinking and practices, and a variety of methods for learning through articles, simulations, graphic organizers, and internships, which require students to demonstrate proficiencies of the 3 dimensionality. There are also many opportunities within this curriculum for the students to communicate verbally, written, and in a large group. The design of the units and the content is genius. It directly engages students in designing solutions, comparing and contrasting, identifying cause and effect relationships of real world problems. The progression of the content provides opportunities for students to repeat investigations to collect precise results and redesign models to find the best possible designs, which are scientific best practices. Students of all different levels have opportunities to learn. The articles have the read-aloud option, vocabulary is pop-up, and the design is similar to PARCC assessment for reading articles which helps with formatting anxiety. There are also areas teachers can reference strategies and methods for students in the unit guides. The spiral bound notebooks provided are useful for writing and recording, but are not necessary as materials are printable or can be shown on a document camera or smart board. Students could bring their own spiral bound notebook to keep their documentation of the lessons. The variety of formative, summative, on-the-fly assessments, and demonstrated proficiency internships for students gives a wide variety of pathways for students to demonstrate content proficiencies. The Unit guides portion is very critical for teachers to establish the storyline of the units and build up student interest into the investigations they will be doing. The overall assessment from a reviewer perspective is that this curriculum creates a real world where students are investigators, engineers, and problem solvers.

SECTION 2 Publisher’s Criteria

Reviewer # and Section 2 Total: #19 TOTAL 100% #20 TOTAL 100% #21 TOTAL 100%
Average Score: 100%

Review Team Assessment of material’s compliance with Section 2: see section 1

Reviewer Comments

Reviewer #: 19

Reviewer Background: Master's in Admin, 20 years teaching, 12 years teaching science 6-8, NM Teacher Liaison 17-18, National Geographic certified educator, Course Map for NGSS and Stem Ready NM standards team member, Secretary of Education Teacher Advisory 2018-19, Exemplary Teacher- Science, Science Olympiad Coach 8 years, Science department head at TCMS

Comments: see above

Reviewer #: #20 Reviewer Background: 22 years of teaching experience. Making Sense of Science Facilitator; Science Literacy Coach (4 years) for ISEC, Teacher Leader Team at school

Comments: see above

Reviewer #: 21 Reviewer Background: Master's in CIA, 21 years Middle School Math/Science experience in the classroom, Math Department Head, NMLead Project, Admin. Certificate, Golden Apple nominee, Educators Rising leader, MC2 Collaborator

Comments: see above

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Text Title:	<u>Physical Science</u>	Publisher:	<u>Amplify Education</u>
Course:	<u>Science</u>	Grade Level:	<u>6-8</u>
SE ISBN:	<u>9781642763621</u>	TE ISBN:	<u>9781642763645</u>
SW ISBN:	<u>9781642763089</u>		

SECTION 1 – NM Content Standards, Benchmarks and Performance Standards

Reviewer # and Section 1 Total: #22 TOTAL 95% #23 TOTAL 97.32% #24 TOTAL 95%
Average Score: 95.8

Review Team Assessment of material’s compliance with Section 1:

The “Amplify Education- Physical Science Gr 8” curriculum aligned well with the NM STEM READY! Standards. Teachers can lead a brief discussion and students can share their answers by means of communication during warm up exercises. This curriculum was highly engaging, because of the higher taxonomy evaluation, reflection, and, “What would you do differently, and why?...How would you approach this problem again, based on what you have learned?...What new knowledge do you now have that could be applied to other problems related this scenario?...” This allows students many opportunities for mastery of the NGSS, and application of concepts cross curricula. Amplify Physical Science Materials encouraged use of content specific vocabulary, workforce vocabulary, and support for ALL EL students. The Curriculum encompassed all DCI’s, CCC’s, and SEP’s comprehensively and fluidly, by having students engage in multiple modalities to explore, and solve, real 21st century, global problems. All units had excellent alignment to CCSS, ELA Argumentative Writing, with learning opportunities to differentiate between poorly written argumentation, and well written argumentation, using evidence in multiple modalities. Mathematics, and Math Practices were embedded throughout all lessons. The videos allowed for student understanding of what engineers really do, and the speakers in the videos were extremely representative of all ages, genders, and ethnicities.

SECTION 2 Publisher’s Criteria

Reviewer # and Section 2 Total: #22 TOTAL 100% #23 TOTAL 100% #24 TOTAL 100%
Average Score: 100%

Review Team Assessment of material’s compliance with Section 2:

Collectively all reviewers agreed that 100% of the criteria were met. The cultural aspects were real world, and not just an, “add on,” to fulfill a requirement, thus, equity was highlighted throughout the curriculum. Technology could have been used as a 1:1, however, if no technology is available, these materials can be used 100% technology free. Every unit had scaffolding for content vocabulary, engineering practices, struggling learners, advanced learners, EL students, and offered opportunities for individual learning and collaborative learning. Along with scaffolding, there were many opportunities within each unit to formatively/ informally assess, providing students to be reflective, and use different types of evidence to support their thinking. Summative assessments, also allowed for reflection, and gave guidelines for teachers, of all levels to re-teach misconceptions, and to check for understanding at deeper levels of knowledge. This program was so rich in globally represented resources, it could be used to support any school population. This program was forward thinking in its format to really teach students how to be problem solving scientists.

Reviewer Comments

Reviewer #: 22 Reviewer Background: 6th Grade Earth Science Teacher, 7 years teaching experience, Level III K-8 Elementary Ed license, BS Biology, MA El Ed

Comments: Very engaging and dynamic curriculum. Accessible to all learning levels and teaching levels.

Reviewer #: 23 Reviewer Background: 7th grade Life Science Teacher, 10 years teaching here in the US. Level III K-8 Elem. Ed license, Gen. Science major, Pre-K-12 Special Ed, MA in Sped, TESOL Endorsed

Comments: Clear vocabulary, safety notes are provided for students and available resources for teacher usage.

Reviewer #: 24 Reviewer Background: Sixth Grade Science Teacher, Level II (Level III pending, Middle Level License pending, with Science Endorsement) endorsement in Agriculture and Psychology. Eight years teaching experience. Was rated Highly Effective in, 2016-17. MA in Curriculum and Instruction.

Comments: Curriculum was well designed in a globally diverse fashion, and was designed to support ALL students, with many opportunities for diverse learners, EL students, collaboration, and many 21st century skills. One of the most comprehensive set of materials I have encountered, with very high rigor.