EduSmart Science Grade 6

EduSmart Science Grade 6 Executive Summary

Section 1. Science-Related Texas Essential Knowledge and Skills (TEKS) and English Language Proficiency Standards (ELPS) Alignment

Grade	TEKS Student %	TEKS Teacher %	ELPS Student %	ELPS Teacher %
Grade 6	100%	100%	100%	100%
Grade 7	100%	100%	100%	100%
Grade 8	100%	100%	100%	100%

Section 2. Instructional Anchor

- The materials are designed to strategically and systematically integrate scientific and engineering practices, recurring themes and concepts, and grade-level content as outlined in the TEKS.
- The materials anchor the learning in phenomena and problems as the key lever for driving learning and student mastery of disciplinary knowledge and skills.

Section 3. Knowledge Coherence

- The materials are designed to build knowledge systematically, coherently, and accurately.
- The materials provide educative components to support teachers' content and coherence knowledge.

Section 4. Productive Struggle

- The materials provide opportunities for students to engage in productive struggle through sensemaking that involves reading, writing, thinking, and acting as scientists and engineers.

Section 5. Evidence-Based Reasoning and Communicating

- The materials promote students' use of evidence to develop, communicate, and evaluate explanations and solutions.
- The materials provide some teacher guidance to support student reasoning and communication skills.

Section 6. Progress Monitoring

- The materials include some variety of TEKS-aligned and developmentally appropriate assessment tools.
- The materials include guidance that explains how to analyze and respond to data from assessment tools.

- The assessments are clear and easy to understand.

Section 7. Supports for All Learners

- The materials provide guidance on fostering connections between home and school.
- The materials include listening, reading, writing, and speaking supports to help Emergent Bilinguals meet grade-level science content expectations.
- The materials include a variety of research-based instructional methods that appeal to a variety of learning interests and needs.
- The materials include guidance, scaffolds, supports, and extensions that maximize student learning potential.

Section 8. Implementation Supports

- The materials include year-long plans with practice and review opportunities that support instruction.
- The materials include some classroom implementation support for teachers and administrators.
- The materials provide implementation guidance to meet variability in program design and scheduling.

Section 9. Design Features

- The visual design of materials is clear and easy to understand.
- The materials are intentionally designed to engage and support student learning with the integration of digital technology.
- The digital technology or online components are developmentally and grade-level appropriate and provide support for learning.

Section 10. Additional Information

- The publisher submitted the technology, price, professional learning, and additional language supports.

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Indicator 2.1

Materials are designed to strategically and systematically integrate scientific and engineering practices, recurring themes and concepts, and grade-level content as outlined in the TEKS.

1	Materials provide multiple opportunities for students to develop, practice, and demonstrate mastery of grade-level appropriate scientific and engineering practices as outlined in the TEKS.	M
2	Materials provide multiple opportunities to make connections between and within overarching concepts using recurring themes.	M
3	Materials strategically and systematically develop students' content knowledge and skills as appropriate for the concept and grade level as outlined in the TEKS.	M
4	Materials include sufficient opportunities, as outlined in the TEKS, for students to ask questions, plan and conduct classroom, laboratory, and field investigations, engage in problem-solving to make connections across disciplines, and develop an understanding of science concepts.	M

Meets | Score 4/4

The materials meet the criteria for this indicator. Materials are designed to strategically and systematically integrate scientific and engineering practices, recurring themes and concepts, and grade-level content as outlined in the TEKS.

Materials provide multiple opportunities for students to develop, practice, and demonstrate mastery of grade-level appropriate scientific and engineering practices as outlined in the TEKS. Materials provide multiple opportunities to make connections between and within overarching concepts using the recurring themes. Materials strategically and systematically develop students' content knowledge and skills as appropriate for the concept and grade level as outlined in the TEKS. Materials include sufficient opportunities, as outlined in the TEKS, for students to ask questions and plan and conduct classroom, laboratory, and field investigations and to engage in problem-solving to make connections across disciplines and develop an understanding of science concepts.

Evidence includes but is not limited to:

Materials provide multiple opportunities for students to develop, practice, and demonstrate mastery of grade-level appropriate scientific and engineering practices as outlined in the TEKS.

- Grade 6 materials use Anchoring Phenomena to connect content standards to engineering practices and "engage students with real-world challenges and situations." Grade 6 materials provide opportunities for students to design and conduct grade-appropriate experiments: In Activity 6.6D, students design their own descriptive investigation about layering unknown substances.
- Scientific and engineering practices (SEPs) can be found throughout the units, such as in 6.10C, "Rock Cycle Activity," where students model the rock cycle through a descriptive investigation. In 6.6A, "Explore States of Matter," students engage in an Engineering Design Challenge called "Molybdenum Matters!" Within materials, each unit 5E Engage activity is centered around an anchoring phenomenon.

- Materials provides a section on its website called Engineering Design that teachers can click on and explore activities that implement engineering practices with grade-level content. For example, in grade 6, there are Engineering Design Challenges found in 6.6A, "Molybdenum Matters!" and 6.11(A)(B) "Garbage Patch Kids to the Rescue!" Furthermore, materials provide multiple opportunities for students to demonstrate mastery of grade-level appropriate SEPs as outlined in the TEKS. Within each reporting category, students practice SEPs through Interactivities (online), Science Investigations (virtual simulations), and other hands-on investigations. Students demonstrate their SEPs through hands-on activities, engineering design challenges, and online simulations. For example, in grade 6, students complete an Engineering Design Challenge as part of the Resource Management Unit. Students conduct research to develop a plan and build a product to clean up the Pacific Garbage Patch based on a set of criteria. Students will present their plans to their peers and must be ready to effectively communicate their design choices.

Materials provide multiple opportunities to make connections between and within overarching concepts using recurring themes.

- The materials grade 6 Scope and Sequence shows recurring themes and concepts (RTC) connections aligned to the grade-level content standards.
- Materials offer an entire unit module on recurring themes in which the unit is designed to give an overview with a series of activities that will introduce students to the different recurring themes. Materials provide a short Instructional Module for each of the RTCs to help students understand how scientists use them to understand the world. Additionally, in the Scope and Sequence document, there are connections between the various recurring themes to the units throughout the grade level. Materials use recurring themes throughout, such as stability and change being used in the WordExplorer, and Journal Activity 6.12C, "Ecosystem – Levels of Organization." The reader for 6.13B, "Characteristics of Organisms," incorporates the structure and function theme.
- Materials provide a page on its website called "Recurring Themes and Concepts (RTCs)." The materials provide opportunities for students to learn about and understand RTCs at the start of the year. This category has each RTC standard listed with activities found within each of these standards. These RTC standards are spiraled within the unit.

Materials strategically and systematically develop students' content knowledge and skills as appropriate for the concept and grade level as outlined in the TEKS.

- Grade 6 materials are designed to develop and build student skills and content knowledge using anchoring phenomena appropriate to the grade level outlined in the TEKS. Grade 6 materials contain a Scope and Sequence that list SEPs, RTCs, and the development of conceptual understanding. The updated implementation guide now "offers instructional materials specifically tailored to scientific and engineering practices" that can be integrated during instructional modules, interactivities, hands-on activities, and in-lab rules. The materials provided an instructional module, instructional module companion, and student review for each standard. These materials allow teachers to strategically introduce and systematically develop content knowledge as outlined in the TEKS.
- The materials in the Teacher's Guide of the Unit Teacher Resources provide prerequisite information for each TEKS within the unit in addition, it gives common misconceptions that students may have regarding that topic. Materials strategically develop students' content

knowledge and skill as appropriate for the concept and grade level as outlined in the TEKS. Suggested SEPs and RTCs are noted in the grade-level Scope and Sequence. The updated implementation guide now "offers instructional materials specifically tailored to scientific and engineering practices" that can be integrated during instructional modules, interactives, hands-on activities, and in-lab rules.

- Materials strategically and systematically organizes the content on its website to develop students' content knowledge and skills as appropriate for the concept and grade level as outlined in the TEKS. The materials are organized into categories including scientific and engineering practices (SEPs), recurring themes and concepts (RTCs), and reporting categories. The reporting categories are further broken down into the standards that align with the reporting category. For example, in grade 6, the reporting category for Force, Motion, and Energy is broken down into units that address specific standards: "Forces Acting on Objects" – 6.7(A)(B), "Newton's Third Law of Motion" – 6.7C, "Comparing Potential and Kinetic Energy" – 6.8A, "Conservation and Transformation Energy" – 6.8B, and "Transverse and Longitudinal Waves" – 6.8C.

Materials include sufficient opportunities, as outlined in the TEKS, for students to ask questions, plan and conduct classroom, laboratory, and field investigations, engage in problem-solving to make connections across disciplines, and develop an understanding of science concepts.

- The materials include opportunities for students to ask questions. For example, each unit has an Anchoring Phenomenon, and students are encouraged to generate their own questions about the phenomenon. The materials provide sufficient opportunities for students to plan and conduct investigations and engage in problem-solving to develop an understanding of science concepts. Within EduSmart's self-scoring rubric, they claim to have four Engineering Design Challenges per grade level –one for each reporting category (Row 7, Column F). The updated materials now include a total of four Engineering Design Challenges for each grade level.
- Materials provide 20 hands-on investigations in grade 6 materials that allow students to plan and conduct classroom, laboratory, and field investigations that make connections across disciplines and develop an understanding of science concepts. For example, in the hands-on activity "Layering the Unknown" in grade 6 unit "Relative Density" aligned to standard 6.6D, students are "challenged to layer four 'mystery liquids.' The students are "responsible for planning this descriptive investigation" and "must outline their procedure before collecting observational data."

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Indicator 2.2

Materials anchor the learning in phenomena and problems as the key lever for driving learning and student mastery of disciplinary knowledge and skills.

1	Materials embed phenomena and problems across lessons to support students in constructing, building, and developing knowledge through authentic application and performance of scientific and engineering practices, recurring themes and concepts, and grade-level content as outlined in the TEKS.	M
2	Materials intentionally leverage students' prior knowledge and experiences related to phenomena and engineering problems.	M
3	Materials clearly outline for the teacher the scientific concepts and goals behind each phenomenon and engineering problem.	M

Meets | Score 4/4

The materials meet the criteria for this indicator. Materials anchor the learning in phenomena and problems as the key lever for driving learning and student mastery of disciplinary knowledge and skills.

Materials embed phenomena and problems across lessons to support students in constructing, building, and developing knowledge through authentic application and performance of scientific and engineering practices, recurring themes and concepts, and grade-level content as outlined in the TEKS. Materials intentionally leverage students' prior knowledge and experiences related to phenomena and engineering problems. Materials clearly outline for the teacher the scientific concepts and goals behind each phenomenon and engineering problem.

Evidence includes but is not limited to:

Materials embed phenomena and problems across lessons to support students to in constructing, building, and developing knowledge through authentic application and performance of scientific and engineering practices, recurring themes and concepts, and grade-level content as outlined in the TEKS.

- Grade 6 materials provide anchoring phenomena for each of the standards. Materials use the anchoring phenomena as the engagement activity for the units where students are able to ask questions. The units contain evidence within lessons that embed a problem for authentic applications for students that connect the SEPs and recurring themes. Please add the following evidence to support the indicator. "For each grade level and standard, there will be an Instructional Module that has phenomena embedded to support grade-level content. For example, in the Instructional Module for TEKS 6.6(E), Evidence of Chemical Changes, students learn that a chemical change results in the formation of new substances. Additionally, phenomena are embedded within the Instructional Modules. Within the Instructional Module for TEKS 6.6(E), students observe the phenomenon that a change in color, a change in temperature, the release of a gas, and the formation of a precipitate are evidence of chemical changes. Through embedded strategic questioning within the Instructional Modules, students can construct and develop their knowledge of grade-level content TEKS." It does provide opportunities for students to watch a video about the anchoring phenomenon and engage in discussion, and it does provide discussion points within the other aspects of the lesson (hands-

on activities, instructional module, etc.) to tie in the phenomenon or revise their thinking. "Every Instructional Module has phenomena embedded within it to support students developing knowledge. The Instructional Modules present real-world scenarios in which students can solve problems through authentic application. The Instructional Module Companion aligns with the Instructional Module to help guide students through the rooted phenomena within the Instructional Module. The Instructional Module Companion for TEKS 6.6(A), States of Matter, supports students in developing knowledge through recurring themes and concepts (RTCs). Within the instructional module companion for TEKS 6.6(A), students must use a graphic organizer to describe and compare solids, liquids, and gasses in terms of structure, shape, volume, and kinetic energy of atoms. This graphic organizer supports RTC TEKS 6.5(A). The Instructional Module Companion also supports core content knowledge through the fillable note-taking guide that aligns with content presented in the Instructional Module.".

- Materials use phenomena as an anchor to introduce students to grade-level content in each discipline (earth/space, life, physical science). For example, in the grade 6 unit Rock Cycle, the phenomenon is based on the question, "How did this rock get its strange shape?" Students generate their own questions and possible explanations for how the rock got its shape. "EduSmart materials provide opportunities for students to develop, evaluate, and revise their thinking as they figure out the phenomena. Evidence to support this can be seen in the simulation for TEKS 6.12(A)(B), Rhize and Grow. Through the Claim, Evidence, and Reasoning lab document, students are able to make their initial claim about "How do Rhizobium bacteria on the roots of red clover plants affect the plants' growth?" While students work through the simulation, they are able to collect evidence from their observations. Lastly, students are able to evaluate if their evidence supports their claim, which allows them the opportunity to revise their thinking as they figure out the phenomena." To access the Claim, Evidence, Reasoning document, please follow the navigation guide below. Grade 6 TX Science > Organisms and Environments> 6.12(A)(B) Interrelationships between Organisms > Online Activities > Simulation > Documents.
- Materials provide materials that use problem-solving through scientific and engineering practices with their Engineering Design Challenges. For example, in grade 6, there are two engineering design challenges, "Molybdenum Matters!" and "Garbage Patch Kids to the Rescue." Both of these activities provide students with a real-world problem, and students have specific guidelines and how to work for a solution to the problem using scientific and engineering practices. "Other lessons and activities provide specific evidence or guidance on how to engage students with phenomena and problems in science." The evidence to support this can be seen in the activity for TEKS 6.4(B), Informed Decisions – Vitamins. Within the teacher document for this activity, it states, "The debate about multivitamins centers around whether they are effective in preventing disease or improving health. Some studies have shown that certain vitamins and minerals can reduce the risk of certain chronic diseases, while other studies have failed to find any significant benefit. Many experts believe that vitamins and minerals are essential for good health and that multivitamins can fill gaps in diets where certain nutrients might be lacking. On the other hand, some believe that multivitamins are unnecessary and may even be harmful if taken in large doses. There is still much debate and uncertainty around the benefits and risks of multivitamin use."

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Materials intentionally leverage students' prior knowledge and experiences related to phenomena and engineering problems.

- Grade 6 materials provide an anchoring phenomenon for each standard to elicit student background knowledge and experiences. "Phenomena are explicitly brought in during other activities and components." Evidence to support this can be found in the anchoring phenomenon for TEKS 6.6(B), Plop, Plop, Fizz, Fizz. "As soon as the tablets drop into the water, a chemical reaction begins, and the carbon dioxide gas bubbles that are seen in the video are formed as a byproduct of this reaction. The resulting solution is a homogeneous mixture of water and these two substances." This phenomenon is explicitly addressed in the Instruction Module for TEKS 6.6(B), Pure Substances and Mixtures, and expanded to connect students to a lemonade mixture "The sugar, on the other hand, is dissolved, and its physical properties have changed." This phenomenon is explicitly brought into the hands-on activity for TEKS 6.6(B) Investigating Mixtures. "In this investigation, you will use different materials to plan and create system models to show a pure substance, a homogenous mixture, and a heterogeneous mixture." The grade 6 Unit Teacher Guide provides the common misconceptions students may have from previous grade levels along with possible explanations why students may have little background knowledge about a concept. For each unit, the Teacher's Guide provides information about what prior knowledge the students have experienced either in prior grades or units related to the content being studied.
- The anchoring phenomenon allows students to experience the phenomenon through a grade-appropriate engagement video or image. The materials provide opportunities to leverage students' prior knowledge and experiences related to phenomena and engineering problems. Materials provide a Vertical Alignment document that allows teachers to ensure connections are made to previous TEKS and allow teachers to build on concepts taught in previous years. This alignment document gives teachers a visual of what prior knowledge students get from previous grade levels. For example, 7th- and 8th-grade teachers see the current and previous years' content standards which allow them to see what knowledge and skills they should have mastered in the previous grade level. In addition, the elementary Vertical Alignment document in the teacher resources is also provided to support teachers being able to view previously learned content standards
- Materials provide a Teacher Guide for each unit that includes a "Prerequisite Knowledge" and "Common Misconceptions." These sections provide teachers with an idea of what knowledge and skills students should have from previous grade levels as well as what concepts they might struggle with in the unit. "The Unit Teacher Guide provides a detailed explanation of which knowledge and skills students should come to the grade level with." This evidence can be seen in the Unit Teacher Guides:

Materials clearly outline for the teacher the scientific concepts and goals behind each phenomenon and engineering problem.

- The grade 6 Teacher's Guide provides the teacher with student learning goals (as TEKS) along with essential questions for the unit, "activities explicitly outline the student learning goals for each phenomenon or engineering problem." Evidence to support this can be seen in the teacher document for student activity for TEKS 6.4(A) "Objective: Students will examine the work of Leonardo da Vinci and its impact on the process of science and society. They will perform a cost-benefit analysis of her contributions to science and form a claim backed by evidence as to

whether the impact is more positive or negative." The hands-on activity for TEKS 6.7(C), Newton's Car, is provided to support the teacher with the scientific concepts and goals behind each phenomenon and engineering problem. "Assign this activity after explaining Newton's third law. Students must know how forces act in pairs and that forces are equal and opposite in magnitude and direction. They must also understand that these forces result from the objects interacting with each other. Instructions: Students will describe, plan, and implement an investigation to create motion in a car using Newton's third law. They will make their cars move without pushing or pulling them. First, they will build a car by adding wheels and axles to the body of the car. After that, they will attach the balloon to propel the car across the surface." To access the teacher document, follow the navigation guide below Grade 6 TX Science > Force, Motion, and Energy > 6.7(C) Newton's Third Law of Motion > Hands-on Activity > Activities > Newton's Car > Documents. Grade 6 materials provide a standards-aligned engineering design challenge for each of the reporting categories as an additional hands-on activity option.

- The materials clearly outline student learning goals behind each engineering problem. Students complete four Engineering Design Challenges throughout the school year, one for each reporting category. The materials provide a "teacher edition" for each Engineering Design Challenge. The teacher edition includes specific TEKS, SEPs, and RTCs addressed in the challenge, directions to get students started, and a scoring rubric for assessing students on their science skills and content. For example, in grade 6, Engineering Design Challenge: Molybdenum Matters! students apply their knowledge of the properties of states of matter to design a new hammer for NASA astronauts to use on the International Space Station.
- Materials provide opportunities for students to engage in scientific and engineering practices with Engineering Design Challenges. Materials include overarching questions for the phenomenon along with guiding questions for students to consider. The materials clearly outline the scientific concepts and goals for each phenomenon. Each of these types of activities includes a goal for the student that is aligned with the phenomena and engineering problem. For example, in grade 6, in an Engineering Design Challenge called "Garbage Patch Kids to the Rescue!" The goal is "develop a plan that efficiently and effectively cleans up the Pacific Garbage Patch."

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Indicator 3.1

Materials are designed to build knowledge systematically, coherently, and accurately.

1	Materials are vertically aligned and designed for students to build and connect their knowledge and skills within and across units and grade levels.	M
2	Materials are intentionally sequenced to scaffold learning in a way that allows for increasingly deeper conceptual understanding.	M
3	Materials clearly and accurately present grade-level-specific core concepts, recurring themes and concepts, and science and engineering practices.	M
4	Mastery requirements of the materials are within the boundaries of the main concepts of the grade level.	M

Meets | Score 6/6

The materials meet the criteria for this indicator. Materials are designed to build knowledge systematically, coherently, and accurately.

Materials are vertically aligned and designed for students to build and connect their knowledge and skills within and across units and grade levels. Materials are intentionally sequenced to scaffold learning in a way that allows for increasingly deeper conceptual understanding. Materials clearly and accurately present grade-level-specific core concepts, recurring themes and concepts, and science and engineering practices. Mastery requirements of the materials are within the boundaries of the main concepts of the grade level.

Evidence includes but is not limited to:

Materials are vertically aligned and designed for students to build and connect their knowledge and skills within and across units and grade levels.

- Grade 6 materials provide a Vertical Alignment document in the teacher resources that shows how the standards are aligned in grades 6, 7, 8, and Biology. The Vertical Alignment document also demonstrates how the content builds in complexity across grade levels using the TEKS. The Vertical Alignment document also visualizes how the standards build upon each other across grade levels, including the science and engineering practices and the recurring themes and concepts standards.
- Grade 6 materials provide a Unit Teacher Guide that contains background information and Prerequisite knowledge: 6.13C Variability and Survival Unit Teacher Guide (Prerequisite Knowledge) states that "students understand what traits are and that they have been passed on from generation to generation, but they have no background knowledge of variation from previous year's TEKS." For example, in 6.7AB, the Unit Teacher Guide states that students have learned in prior grades that forces can be weak or strong. Then within that unit, students learn how those forces act on objects. Later in the unit, students calculate the net forces acting on an object. In another example within grade 6 materials, in standard 6.8A – "Compare and contrast gravitational, elastic, and chemical potential energies with kinetic energy," the Unit Teacher Guide informs the teacher that students have no prior knowledge of kinetic or potential energy from previous grade levels, and this will be the first time they will learn this information.

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- EduSmart provides materials within the grade level that connect and build content knowledge and skills. The Content Library provides opportunities for students to build their knowledge within units and is organized by reporting category and standard. For example, in grade 6, there are activities designed for students to build knowledge around standard 6.8B- describe how energy is conserved through transfers and transformations in systems such as electrical circuits, food webs, amusement park rides, or photosynthesis. These activities help build the foundation for the grade 7 standard 7.8A – investigate methods of thermal energy transfer into and out of systems, including conduction, convection, and radiation.

Materials are intentionally sequenced to scaffold learning in a way that allows for increasingly deeper conceptual understanding.

- Grade 6 materials provide students with scaffolded learning through the use of demonstrations/visuals in the anchoring phenomenon, followed by the use of visuals they can relate to in the Instructional Modules. When using the instructional module companion, the students can follow along with the module, take notes, and have a graphic organizer and writing prompt/journal activity to "ensure student content mastery." For example, at the start of unit 7.6C, Newton's Third Law, students build a device that will create motion. Students are then introduced to the concept of the Laws of Motion by reading about the third law of motion. Then students apply the information from the law to applications of the law by exploring how variations in the variables, such as direction and mass, affect the motion of objects. An additional example includes the grade 6 unit Metals, Nonmetals, and Metalloids, where students explore the physical properties of elements and predict their classification; students take notes (explain) on properties of metals, nonmetals, and metalloids; and finally, students elaborate their understanding by completing a journal entry prompt that provides properties of an element and has the student write a claim, evidence, reasoning statement to classify the element.
- In the Unit Teacher Guide for each module, teachers are given a series of essential questions to guide students' learning. These questions are sequenced to build upon the learning for students throughout the unit. For example, in the unit teacher's guide, the questions are sequenced to start with students being able to understand and define a population and describe its characteristics. Students then will learn about a community. They will then compare and contrast a population to a community. Students will then learn about a community and an ecosystem. Lastly, students will be able to determine how the stability of an ecosystem is influenced by the health of a population.
- Materials are sequenced in a way that activates or builds prior knowledge before explicit teaching occurs. All of the units begin with a phenomenon to engage students in the learning, followed by a hands-on or virtual activity to allow students to explore the content before explicit instruction on the TEKS. According to the Implementation Strategies document in each unit, grade 6 materials can be sequenced in a way that activates and builds on prior knowledge, beginning with the anchoring phenomenon to the instructional modules, quizzes, interactivities, and suggested stations and differentiation activities. This sequencing provides materials in a gradual release model to scaffold learning in a way that allows for an increasingly deeper conceptual understanding. For example, in grade 6, in the unit "States of Matter," students experience lessons that connect and scaffold content knowledge, starting with an anchoring phenomenon activity that introduces students to the phenomenon of the unit, then progressing towards an engineering design challenge that allows students to design a new hammer for NASA based on elemental properties, and then into direct teach opportunities with the Instructional

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Module that allows students to compare solids, liquids, and gases in terms of structure, shape, volume, and energy of atoms in molecules.

Materials clearly and accurately present grade-level-specific core concepts, recurring themes and concepts, and science and engineering practices.

- Grade 6 Scope and Sequence provides suggested RTCs and SEPs to align to each unit and identifies suggestions of which specific practice and theme to embed within each unit. The Scope and Sequence at each grade level present all grade-level core concepts, recurring themes and concepts, and the science and engineering practices.
- EduSmart provides materials aligned with the content standards, and their material is organized by category and further broken down into units of the grade level standards. Note that the recurring themes and concepts and science and engineering standards are not incorporated into the unit activities; they have their own separate categories.
- Materials include the 5E (Engage, Explore, Explain, Elaborate, Evaluate) model section for sequencing science instruction for each category standard and unit. Materials clearly and accurately present core concepts and science and engineering practices as evidenced by a hands-on lab investigation.

Mastery requirements of the materials are within the boundaries of the main concepts of the grade level.

- Grade 6 materials include a Scope and Sequence of how long each unit should take. For example, in the Scope and Sequence document, vocabulary words are listed, showing which words were previously taught and which are new for that unit and grade level.
- Grade 6 materials provide the main concepts students must master for the grade level. For example, 6.13B – Characteristics of Organisms Teacher Guide provides the teacher with prerequisite knowledge stating, "This topic has not been covered in previous TEKS. This will all be new information, … " Another example is grade 6, standard 6.6B – “investigate the physical properties of matter to distinguish between pure substances, homogeneous mixtures (solutions), and heterogeneous mixtures.” The Prerequisite Knowledge section provides what students should have learned from previous grades.
- Materials provide Essential Questions in the grade-level Scope and Sequence to define the boundaries of the main concepts that students must master for the grade-level course. The same Essential Questions can also be found in the Unit Teacher Guide with possible answers.
- EduSmart Quizzes found in assessments are available for every core category standard. The quizzes assess student mastery of the core concepts within the course through multiple-choice questions.

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Indicator 3.2

Materials provide educative components to support teachers' content and knowledge coherence.

1	Materials support teachers in understanding the horizontal and vertical alignment guiding the development of grade-level content, recurring themes and concepts, and scientific and engineering practices.	M
2	Materials contain explanations and examples of science concepts, including grade-level misconceptions to support the teacher's subject knowledge and recognition of barriers to student conceptual development as outlined in the TEKS.	M
3	Materials explain the intent and purpose of the instructional design of the program.	M

Meets | Score 6/6

The materials meet the criteria for this indicator. Materials provide educative components to support teachers' content and knowledge coherence.

Materials support teachers in understanding the horizontal and vertical alignment guiding the development of grade-level content, recurring themes and concepts, and scientific and engineering practices. Materials contain explanations and examples of science concepts, including grade-level misconceptions to support the teacher's subject knowledge and recognition of barriers to student conceptual development as outlined in the TEKS. Materials explain the intent and purpose of the instructional design of the program.

Evidence includes but is not limited to:

Materials support teachers in understanding the horizontal and vertical alignment guiding the development of grade-level content, recurring themes and concepts, and scientific and engineering practices.

- Grade 6 materials provide a Vertical Alignment document that shows how grades 6–8 and Biology standards are aligned. The materials also provide an Implementation Strategies document. The materials include a Unit Teacher Guide that provides teachers with prerequisite knowledge of what students have learned prior to that grade level. The materials also provide a Scope and Sequence at each grade level to support teachers in understanding the horizontal alignment across the grade-level content, recurring themes and concepts, and science and engineering practices. The vertical alignment document for teachers to see prior and future grade-level standards.
- Materials provide clear and easy-to-follow guidance and support for teachers within the content unit documents. The activities are aligned with content standards and grade-level content. EduSmart provides a Unit Teacher Guide for each unit.The Scope and Sequence provide teachers with a horizontal and vertical alignment of the grade-level TEKS with the embedded connection of the recurring themes and science and engineering practices. The embedded connection is placed within each unit of study, thus highlighting clear connections for educators to use. The curriculum builds coherently across lessons and units, increasing in complexity throughout the year. The Scope and Sequence document also includes unit TEKS, essential

questions, and possible activities that support teachers in understanding the alignment of grade-level content.

Materials contain explanations and examples of science concepts, including grade-level misconceptions to support the teacher's subject knowledge and recognition of barriers to student conceptual development as outlined in the TEKS.

- Grade 6 materials provide a Unit Teacher Guide in every grade level that includes background knowledge, prerequisite knowledge, misconceptions, a list of Essential Questions and their answers, and examples of science concepts. This includes prerequisite knowledge of what students have learned prior to that grade level. The document includes a section on common student misconceptions that may become barriers to concept development.
- The Unit Teacher Guide for each student's expectation provides background information, prerequisite knowledge, essential questions, and common misconceptions for each concept. Teachers can locate background knowledge for each standard, which includes overviews of the scientific content learned and the overall goal of the standard to support teacher content knowledge. For example, the Grade 6 Unit Teacher Guide for standard 6.6A states, “This unit reinforces the ideas that there are three different states of matter, solids, liquids, and gases. The properties of solids include definite shape and volume, with tightly packed particles that don’t allow the particles to change positions when vibration occurs, resulting in low kinetic energy. Liquid particles are loosely packed and are able to change positions more easily, giving them higher kinetic energy. This allows them to change shape readily, but the volume stays the same. Gases have neither definite shape nor volume; they take on the shape they are put in, and because they are far apart and can move, they possess very high kinetic energy.”
- Teachers can locate common misconceptions for each standard in the correlating Unit Teacher Guide. This information provides teachers with common grade-level misconceptions that are barriers to students' conceptual development. For example, the Grade 6 Unit Teacher Guide for standard 6.6A states, “Due to a lack of experience, students may not realize that particles stay the same size no matter their temperature; it is the way they move around that causes them to take up more space, not that the particles are getting bigger.”

Materials explain the intent and purpose of the instructional design of the program.

- EduSmart provides an Implementation Strategies guide that explains the intent of the various activities. EduSmart provides a Unit Teacher Guide for each unit, the various components of the units, and the purposes for each component. It gives an expected timeframe for each as well as the intended outcome for students and guidance for teachers in using that specific component of the unit but does not provide a framework that explains the goals of the program. Materials are designed in the 5E lesson format that provides an evidence-based design framework for instruction.
- Materials provide a Letter to Caregivers to introduce families to the EduSmart science curriculum. The letter describes EduSmart’s instructional design as “to provide an engaging, interactive way for your children to explore science topics and develop a deeper understanding of scientific concepts.” The letter continues to describe how families can support learning about science from home and the additional support materials that can be found in EduSmart to help students be successful, like “vocabulary practice, online digital labs, and interactive games.”

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Indicator 4.1

Materials provide opportunities for students to engage in productive struggle through sensemaking that involves reading, writing, thinking, and acting as scientists and engineers.

1	Materials consistently support students' meaningful sensemaking through reading, writing, thinking, and acting as scientists and engineers.	M
2	Materials provide multiple opportunities for students to engage with grade-level appropriate scientific texts to gather evidence and develop an understanding of concepts.	M
3	Materials provide multiple opportunities for students to engage in various written and graphic modes of communication to support students in developing and displaying an understanding of scientific concepts.	M
4	Materials support students to act as scientists and engineers who can learn from engaging in phenomena and engineering design processes, make sense of concepts, and productively struggle.	M

Meets | Score 4/4

The materials meet the criteria for this indicator. Materials provide opportunities for students to engage in productive struggle through sensemaking that involves reading, writing, thinking, and acting as scientists and engineers.

Materials consistently support students' meaningful sensemaking through reading, writing, thinking, and acting as scientists and engineers. Materials provide multiple opportunities for students to engage with grade-level appropriate scientific texts to gather evidence and develop an understanding of concepts. Materials provide multiple opportunities for students to engage in various written and graphic modes of communication to support students in developing and displaying an understanding of scientific concepts. Furthermore, Materials support students to act as scientists and engineers who can learn from engaging in phenomena and engineering design processes, make sense of concepts, and productively struggle.

Evidence includes but is not limited to:

Materials consistently support students' meaningful sensemaking through reading, writing, thinking, and acting as scientists and engineers.

- According to the grade 6 Implementation Guide, materials provide WordExplorer activities to practice vocabulary, journal prompts that integrate writing, and readers that provide "high-quality high interest leveled readers that connect the TEKS to a real-world scenario or problem."
- Materials provide opportunities for students to read and write throughout the modules. Through leveled readers and journal writing, students can engage in sensemaking to make connections with the content. Materials provide students the opportunity, through the use of phenomena and hands-on exploration activities, to ask questions as well as answer questions as they engage in the content.
- Many units provide a Journal Prompt activity "to foster critical thinking skills and the ability to express ideas clearly." Journal Prompts provide a "range of depth knowledge and require students to delve deeper into scientific concepts and provide explanations that showcase their

understanding." Educators are encouraged to use the Journal Prompt as exit tickets, quick writes, or short-constructed responses to check on student understanding of the scientific concepts.

- Many units provide an activity called Readers, which provides “a real world-scenario or problem.” The Reader is available in at least two Lexile levels to allow for easy differentiation for students. The Reader provides engaging content to help students gather evidence and develop an understanding of scientific concepts. Each Reader also includes a five-question comprehension check which includes three multiple-choice, one text entry, and one short-constructed response question.
- Materials provide materials that allow and support students to make sense of their learning. One of the ways that materials this opportunity is through its Engineering and Design activities. For example, 6th-grade students have four different opportunities to design solutions to real-life problems. Materials provide activities that allow students to make sense of their learning of phenomena and concepts.

Materials provide multiple opportunities for students to engage with grade-level appropriate scientific texts to gather evidence and develop an understanding of concepts.

- Grade 6 materials provide "high-quality, high-interest leveled readers that connect the TEKS to a real-world scenario or problem." Grade 6 materials provide WordExplorer activities to practice vocabulary, journal prompts that integrate writing, and graphic organizers in the Instructional Module Companions.
- Materials provide opportunities for students to use grade-level appropriate texts through the use of leveled readers. For example, 6.6B, Pure Substances and Mixtures, has two readers for students approaching grade level and students on grade level. One reader is on atoms, elements, compounds, and mixtures. The other reader is on solutions and other mixtures. Questions to assess learning accompany the texts. Furthermore, in the Instructional module, materials provide an accompanying Instructional module companion that allows students to gather evidence to scaffold their learning of the concepts as they review the information in the instructional module.
- Many units provide a digital vocabulary activity called WordExplorer, which includes “multi-part vocabulary practice … towards mastery of all vocabulary related to a topic.” Students engage with the vocabulary words by identifying images that relate to the words, reading textual facts and choosing the correct statements, and filling in the blanks with the correct word to complete the statement. Many EduSmart units provide a Reader activity, which is available at multiple reading levels. The Reader provides engaging content to help students gather evidence and develop an understanding of scientific concepts. Each Reader also includes a five-question comprehension check which includes three multiple-choice, one text entry, and one short-constructed response question.
- Materials provide approaching and grade-level appropriate texts that engage students to help them gather evidence and develop an understanding of concepts. Materials include both approaching and grade-level-appropriate texts that help students understand the scientific phenomena they are learning within the instructional units.

EduSmart Science Grade 6

Materials provide multiple opportunities for students to engage in various written and graphic modes of communication to support students in developing and displaying an understanding of scientific concepts.

- Grade 6 Instructional Module and Instructional Module Companion provide students an opportunity to take notes while watching a lesson, use a graphic organizer to make connections and end with a journal prompt to explain their thinking/understanding about a concept. Grade 6 materials provide opportunities for students to communicate thinking through conducting hands-on investigations and discussions about the anchoring phenomenon.
- Materials provide various communication modes to support student understanding of scientific concepts. For example, in 6.6C, Metals, Nonmetals, and Metalloids, there is a journal option in which students will respond to open-ended questions related to the instructional module components. In the explore section module 6.8A, Comparing Potential and Kinetic Energy, students will interact with the content by completing an interactive activity on “Is it Potential or Kinetic?” and a simulation activity on “Design the Ride.”
- Materials provide multiple opportunities for students to engage in various written and graphic modes of communication to support developing and displaying an understanding of scientific concepts. For example, in 6.8B, Energy in Motion: Designing Amusement Park Rides activity, students create a sketch (graphic/model) of their amusement park ride to explore energy in motion and how it is transferred and transformed. Students will also answer five analysis questions to apply their knowledge of energy transformations, conservation of energy, and academic vocabulary.
- Materials provide multiple opportunities for students to engage in various written modes of communication to support students in developing and displaying an understanding of scientific concepts. They provide many Journal opportunities for students to respond to after an instructional module. For example, in grade 6, students have the opportunity to journal about metals and nonmetals after viewing an instructional module.
- Materials provide multiple opportunities for students to engage in graphic modes of communication to support their understanding of concepts they are learning in science. Each reporting category contains an engineering and design challenge that allows students to design, create, or come up with a solution to real-life problems that connect to the concepts they learn within the instructional units. This allows students to write, draw, model, create prototypes, and other various modes of displaying their knowledge of scientific phenomena.

Materials support students to act as scientists and engineers who can learn from engaging in phenomena and engineering design processes, make sense of concepts, and productively struggle.

- Grade 6 activities provide opportunities for students to construct explanations of how and why various phenomena or problems occur.
- Materials provide students with anchoring phenomena within each unit to anchor their learning. EduSmart provides four engineering design challenges to support students acting as engineers to make sense of scientific concepts
- Grade 6 Engineering and Design Challenges “leverage students' prior knowledge and provide an opportunity for students to collaborate in designing solutions to authentic, real-world problems."Materials support students to act as scientists and engineers who can learn from engaging in engineering design processes to make sense of science concepts and productively struggle. The engineering design challenges, along with at least 15 hands-on activities that

provide authentic student engagement to productively struggle and build science knowledge about the world around them. Furthermore, materials support students to act as scientists and engineers who can learn from engaging in phenomena-based instruction.

- EduSmart uses real-world phenomena to begin each unit and engage students in the learning process. The phenomena are referred back to during the Instruction Modules so students are able to review their previous ideas and make adjustments based on their new knowledge.

EduSmart Science Grade 6

Indicator 5.1

Materials promote students' use of evidence to develop, communicate, and evaluate explanations and solutions.

1	Materials prompt students to use evidence to support their hypotheses and claims.	M
2	Materials include embedded opportunities to develop and utilize scientific vocabulary in context.	M
3	Materials integrate argumentation and discourse throughout to support students' development of content knowledge and skills as appropriate for the concept and grade level.	M
4	Materials provide opportunities for students to construct and present developmentally appropriate written and verbal arguments that justify explanations to phenomena and/or solutions to problems using evidence acquired from learning experiences.	M

Meets | Score 4/4

The materials meet the criteria for this indicator. Materials promote students' use of evidence to develop, communicate, and evaluate explanations and solutions.

Materials prompt students to use evidence to support their hypotheses and claims. Materials include embedded opportunities to develop and utilize scientific vocabulary in context. Materials integrate argumentation and discourse throughout to support students' development of content knowledge and skills as appropriate for the concept and grade level. Furthermore, materials provide opportunities for students to construct and present developmentally appropriate written and verbal arguments that justify explanations to phenomena and/or solutions to problems using evidence acquired from learning experiences.

Evidence includes but is not limited to:

Materials prompt students to use evidence to support their hypotheses and claims.

- Grade 6 materials include a Claim, Evidence, and Reasoning (CER) activity for students to complete when conducting simulations. During the simulation, the students collect data and evidence to support their claims. There are two simulation activities for the course: 6.8A in Force and Motion and 6.12AB in Organisms and Environment. Furthermore, grade 6 materials include hands-on activities for each component/TEKS. These activities require students to use the evidence/data they gather to support their hypothesis.
- In the Explore activity section of the 5E lesson, materials prompt students to use evidence to support their claims. An example would be in 6.6A; Comparing Models of solids, liquids, and gases; the reflection questions ask students to "think about what happens to the kinetic energy of particles in solid ice when you heat it. How can you use it to explain how solid ice melts to form liquid water?" Also, in 8.6E, Common Chemical Reactions Elaborate Reader, students are asked to explain the relationship between chemical reactions and increased speed. They must use text evidence to support their answer.
- Materials prompt students to use evidence to support their hypotheses and claims. For example, in the 6.8A Journal, "Comparing Potential and Kinetic Energy," students use their knowledge from the Instructional Module to explain how energy changes in a marble on a U-

shaped track. Students also explain why the marble will eventually stop moving over time. Additionally, materials prompt students to use evidence to support their hypotheses and claims. For example, in the 6.12AB simulation activity, “Rhize ‘N’ Grow!" students observe the growth of two sets of red clover plants, one that is treated with Rhizobium bacteria and the other untreated. Students measure the height of the clover and record observations over a simulated two-week period. As a conclusion, students write about the interrelationship between Rhizobium bacteria and red clover plants using a Claim, Evidence, and Reasoning graphic organizer.

- Materials provide hands-on activities that allow students to support their claims with evidence and reasoning. For example, in the grade 6 activity, "How Can You Make an Action Figure Jump Higher?" the students must design and carry out an investigation that allows them to develop a rule that explains how an action figure can be made to jump lower or higher on a teeterboard based on what they know about the conservation of energy and models. There is a CER Frame present within the activity, with the guiding question: "How can you make an action figure jump higher?"
- Materials provide simulations that allow students to support their claims with evidence and reasoning. For example, in the grade 6 simulation, “Design the Ride,” students must complete the online investigation simulation by designing a roller coaster track by creating three hills of different heights, testing the ride for completion, testing different variations in the heights, and comparing their results. There is a CER worksheet the students must complete that asks, "How does the height of each successive hill on a roller coaster track affect the roller coaster ride?" Materials also provide Journal activities that allow students to support their claims or answers to questions with evidence and reasoning. For example, in a grade 6 journal activity for Potential and Kinetic Energy, students must "explain the energy changes taking place. Why does the marble stop moving after some time?"

Materials include embedded opportunities to develop and utilize scientific vocabulary in context.

- Teachers can preview the vocabulary using a WordExplorer, and then have students read through a Reader activity and provide context to the vocabulary terms they are learning for the concept. For example, in grade 6, there is a reader that compares potential and kinetic energy that allows students to learn the vocabulary word "potential energy" in context.
- The Instructional Module (IM) Companion includes a notetaking guide that has word banks for students to use the vocabulary in content, as well as a graphic organizer to re-emphasize the content, in this case as a pure substance, homogeneous, or heterogeneous mixture. According to the Implementation Guide, the WordExplorer activities use scientific terms from the IM. This is a flash-card-type activity that uses text, audio, and visual descriptions to help students understand and retain the words and their meaning. The WordExplorer, specifically 6.6B contains words related to the content. The words included in this activity are electrical energy, light energy, magnetic force, mass, friction, potential energy, balanced forces, chemical energy, nuclear energy, solar cell, crescent moon, Earth's axis, Earth's equator, gibbous moon, and neap tides.
- Materials include embedded opportunities to develop and utilize scientific vocabulary in context. Each unit includes a note-taking guide as part of the IM Companion, which allows students to practice identifying science vocabulary in the context of the scientific content. Following the fill-in-the-blank note-taking guide, students complete a graphic organizer, which allows them additional practice with the unit-specific vocabulary. Units include a WordExplorer activity, a “multi-part vocabulary practice for low-risk, high engagement practice towards

mastery of all vocabulary related to a topic." Students will develop their science vocabulary by 1) matching images to the vocab words, 2) reading facts about the words and matching all that apply, and 3) dragging and dropping the appropriate word to complete the statement. Materials provide at least one WordExplorer activity in each reporting category.

- Materials provide opportunities for students to develop and utilize scientific vocabulary in context. WordExplorer activities allow students to "practice for low-risk, high-engagement practice towards mastery of all vocabulary related to a topic." Part one of the activity allows students to choose all the correct images related to a word. Part two of the activity allows students to read textual facts and choose correct statements that relate to the vocabulary word. Part three utilizes a close activity "where students drag and drop appropriate words to complete a statement that represents the correct application of the vocabulary."
- Additionally, materials provide instruction with embedded opportunities that allow students to develop and utilize scientific vocabulary in context with their Instructional Modules and Instructional Module Companions. Students fill in notes that utilize vocabulary in context to the lesson and topic being taught within the Instructional Module. They also must fill in a graphic organizer that provides visual learning of the concept or topic that utilizes scientific vocabulary. Students also have the opportunity to practice using vocabulary terms by answering a journal prompt that summarizes their understanding of concepts. Teachers use the Scope and Sequence document to ensure they are explicit with the vocabulary terms used within this activity.
-

Materials integrate argumentation and discourse throughout to support students' development of content knowledge and skills as appropriate for the concept and grade level.

- Materials include opportunities for argumentation and discourse, such as that prompted in the Anchoring Phenomena activities. The teachers are instructed to allow students to discuss and only guide the conversation by prompting questions when they are stuck. When using the IM and a question is asked, the video pauses to allow for discussion (whole group, small group, or partners).
- Hands-on activities have sections called "Initial Argument" and "Argumentation Session" that have students develop their initial argument and then allow all groups to share their arguments through discourse. Students must listen to other groups and critique others' arguments. Furthermore, students engage in Engineering and Design Challenges, they design various prototypes, models, and presentations to solve a real-world problem or situation. They frequently obtain feedback along the way and, in the final presentation, must present their completed task through argument and discourse.
- Materials integrate opportunities for students to engage in argumentation and discourse. For example, in the 6.6A States of Matter, EDC Molybdenum Matters, students create a prototype hammer from aluminum foil and other materials. The students must be able to explain their design and tell others why they think their materials will work best. They inform and persuade others, and engage in argumentation as they receive feedback from others about their product design. In 6.8AB, Action Figure Jump, students must investigate the question, "How can you make an action figure jump higher? Students will write a CER and then engage in an argumentative session as they explain their findings to other groups and receive feedback.
- Materials integrate argumentation and discourses throughout to support students' development of content knowledge and skills. For example, each unit starts with an Anchoring Phenomena to encourage discourse among the class as they try to make sense of the science concepts they are viewing in the video or image. In 6.10C, Rock Cycle, students see an image of

a rock with an odd shape and discuss how it could have gotten its shape. For example, part of the Engineering Design Challenge process is for groups to share their design with the class, defend their design choices when needed, and receive feedback. This process allows students to practice defending their design choices with science concepts and implement the feedback to make adjustments or improvements to their overall design prior to grading.

Materials provide opportunities for students to construct and present developmentally appropriate written and verbal arguments that justify explanations to phenomena and/or solutions to problems using evidence acquired from learning experiences.

- Materials include journal prompts that require students to construct a written explanation or argument. Students need to supply sufficient evidence to support their claim/argument/explanation. The materials also include opportunities for argumentation and discourse, such as that prompted in the Anchoring Phenomena activities. The teachers are instructed to allow students to discuss, and only guide the conversation by prompting questions when they are stuck. For example, in the 6.6A States of Matter, EDC Molybdenum Matters, students create a prototype hammer from aluminum foil and other materials. The students must be able to explain their design and tell others why they think their materials will work best. They inform and persuade others and engage in argumentation as they receive feedback from others about their product design. In 6.8AB Action Figure Jump, students must investigate the question, "How can you make an action figure jump higher?" Students will write a CER and then engage in an argumentative session as they explain their findings to other groups and receive feedback.
- Materials provide instruction that gives students opportunities to construct and present written and verbal arguments that allow them to justify explanations of phenomena and solutions to problems using evidence from what they learned about the concept or topic. The Engineering and Design challenges allow students to design a solution to a real-world problem based on the experience and knowledge obtained about the phenomena or topic. The challenges give students the opportunity to experience the engineering and design process, which includes research, imagining solutions, planning, creating, testing, improving based on feedback, and communicating their results to peers. Materials also provide materials that give students opportunities to create and present verbal or written explanations with justification through their Anchoring Phenomenon activities, reflection questions in their hands-on activities, CER frameworks in of their hands-on activities, argument formation and sessions within hands-on activities, providing text evidence from readers to answer questions and responses to journal prompts.

EduSmart Science Grade 6

Indicator 5.2

Materials provide teacher guidance to support student reasoning and communication skills.

1	Materials provide teacher guidance on anticipating student responses and the use of questioning to deepen student thinking.	M
2	Materials include teacher guidance on how to scaffold and support students' development and use of scientific vocabulary in context.	PM
3	Materials provide teacher guidance on preparing for student discourse and supporting students in using evidence to construct written and verbal claims.	PM
4	Materials support and guide teachers in facilitating the sharing of students' thinking and finding solutions.	M

Partial Meets | Score 2/4

The materials partially meet the criteria for this indicator. Materials provide some teacher guidance to support student reasoning and communication skills.

Materials provide teacher guidance on anticipating student responses and the use of questioning to deepen student thinking. Materials include some teacher guidance on how to scaffold and support students' development and use of scientific vocabulary in context. Materials provide some teacher guidance on preparing for student discourse and supporting students in using evidence to construct written and verbal claims. Materials support and guide teachers in facilitating the sharing of students' thinking and finding solutions.

Evidence includes but is not limited to:

Materials provide teacher guidance on anticipating student responses and the use of questioning to deepen student thinking.

- The EduSmart materials provide teacher guides for each unit that incorporate essential questions with answers that can be used to deepen student thinking. An example would be with the 6.6A States of Matter Unit in which there are four essential questions provided: "How does the structure of solids, liquids, and gasses differ from one another? How do the shape and volume of solids, liquids, and gasses differ from one another? How does the kinetic energy of atoms and molecules in solids, liquids, and gasses differ from one another?, and What is the relationship between temperature and kinetic energy of atoms and molecules in solids, liquids, and gasses?." In the hands-on activity, Materials provide questions for students to connect and guide their thinking as they complete the hands-on investigation activity. For example, with the 6.6A Solids, liquids, and gasses student investigation, there are analysis questions, reflection questions, and extension questions.
- The Unit Teacher Guides also have a Common Misconceptions section. For example, in 6th grade for standard 6.6C, the Teacher Unit Guide states: "Students can confuse malleability and ductility. They often believe all metals are shiny and magnetic." Materials provide a Unit Teacher Guide that has an Essential Questions section that allows the teacher to use questions to deepen students' thinking. In 6th grade for standard 6.8A, the Unit Teacher Guide Essential

Questions include: "What are the differences between kinetic energy and potential energy? How are they related to an object's motion and position?

- The materials provide questions to students within their activities that they must answer to help check their understanding of the lesson. The teacher need to preview these questions in order to help pose them to students. There is specific teacher guidance for questioning within Anchoring Phenomenon activities.

Materials include teacher guidance on how to scaffold and support students' development and use of scientific vocabulary in context.

- Materials provide the scope and sequence that gives a list of vocabulary targeted for that unit. It also provides a unit teacher's guide that gives a formal definition of the essential vocabulary that will be incorporated within that unit. For example, in 6.10B Layers of Earth, the vocabulary includes inner core, outer core, mantle, and crust. Materials use the implementation strategies document to show which elements can be used to embed vocabulary, and additional supports can be found in the ELPS Strategies Guide. For example, within the ELPS Strategy Guide, on the top of page 3, teachers are suggested to pre-teach vocabulary, provide word banks or keyword lists, and include sentence stems and starters. The materials do not provide guidance on how to scaffold and support students' development of vocabulary.
- EduSmart provides a Scope and Sequence that identifies new grade-level words. These words appear in some activities throughout the specified unit. For example, the unit for Pure Substances and Mixtures, TEKS 6.6(B), identifies the new to grade level words as pure substance, distillation, filtration, homogenous mixture, and heterogenous mixture. These words appear again in the hands-on activity Investigating Mixtures. Students must identify how the models they created for a pure substance, a heterogenous mixture, and a homogenous mixture are alike and how they are different. The teacher document provides background information about pure substances, heterogeneous mixtures, and homogeneous mixtures. This guidance provides teachers with the background knowledge regarding these scientific words, but not how to scaffold and support students in using them in context.
- Materials provide a Scope and Sequence that lists vocabulary terms by unit into "new grade level words" and "words with prior knowledge" but does not provide guidance on how to scaffold or support students' development and use of scientific vocabulary in context as materials cited in their rubric. This document only provides what vocabulary a student should have been previously exposed to, not how to scaffold or support. Their Implementation Guide for the Scope and Sequence states: "Unit vocabulary that will be addressed during a specific content unit,..." which suggests the vocabulary is listed, but there is no evidence that it is scaffolded In any way.
- The WordExplorer is cited in the Implementation Guide as the main activity to use for vocabulary practice. EduSmsart has provided a WordExplorer activity for each unit of study.

Materials provide teacher guidance on preparing for student discourse and supporting students in using evidence to construct written and verbal claims.

- In each of the 4 Engineering Design Challenges, there are discussion questions and analysis questions. The materials do not provide materials to support students to use evidence to support claims. EduSmart simulation activities include documents that enable students to use Claim, Evidence, and Reasoning to construct a written response.

EduSmart Science Grade 6

- EduSmart provides short modules for the start of the year to introduce Science and Engineering Practices and Recurring Themes and Concepts. One of the SEP modules includes an activity titled "Why Ask Questions" and provides guidance for students to use evidence to construct written and verbal claims. The teacher document provides thorough background information on fostering a culture of questioning in the field of science.
- Each unit guide provides common misconceptions and essential questions to reference and help guide student discourse. Materials lack teacher guidance and support for instructing students in using evidence to construct written and verbal claims, even though activities like simulations and engineering design challenges require students to use evidence to support their ideas.
- Materials provide Anchoring Phenomenon activities that provide teacher guidance on preparing for student discourse. However, these activities do not support using evidence to construct a written or verbal claim as materials cited in their rubric. EduSmart provides short modules for the start of the year to introduce Science and Engineering Practices, and one of the SEP modules is titled "Analyzing Data from Descriptive Investigations." While the skill is taught at the beginning of the year, EduSmart materials do not emphasize or provide reminders for teachers or students to spiral these skills throughout all units.

Materials support and guide teachers in facilitating the sharing of students' thinking and finding solutions.

- The materials provide an anchoring phenomenon activity that gives teachers background information to explain the phenomenon and sample question prompts to help scaffold student questioning. Furthermore, the SEPs activities provide teacher background information, instructions, and reflection questions to facilitate students' questioning as well as finding a solution to the problem within the activity.
- Materials provide support and guide teachers in facilitating students' thinking by providing in the discussion question section of the engineering design challenges a section on design analysis in which there are suggested questions that the teacher can ask the students. This is evident in 6.13C EDC, in which teachers are guided to ask students questions like: Is it OK to sacrifice one or two organisms for the benefit of all of the rest? Materials support and guide teachers in facilitating the sharing of students' thinking and finding solutions. For example, each unit starts with an Anchoring Phenomenon to provide a foundational and shared experience for the class to reference and apply their knowledge to throughout the unit. Students view, discuss, and share their own questions about the phenomenon. The Anchoring Phenomenon teacher document provides an explanation of the question to help guide students as they continue to discuss and formulate their own questions but reminds the teacher not to share the answer.
- Materials provide Engineering and Design Challenges that support and guide teachers in facilitating students' thinking and finding solutions. The Engineering Design Challenges include teacher versions that provide background information, a design analysis section that has probing questions for students, and product discussion that allows students to share their thinking with others, get feedback, and explain and receive critiques of their design. In a 6th-grade Engineering and Design Challenge called "Focus at Play at Harmony Hills," the Discussion section of the activity guides teachers, "Teams will explain how the equipment works and the forces involved."

EduSmart Science Grade 6

Indicator 6.1

Materials include a variety of TEKS-aligned and developmentally appropriate assessment tools.

1	Materials include a range of diagnostic, formative, and summative assessments to assess student learning in a variety of formats.	M
2	Materials assess all student expectations over the breadth of the course and indicate which student expectations are being assessed in each assessment.	PM
3	Materials include assessments that integrate scientific concepts and science and engineering practices with recurring themes and concepts.	M
4	Materials include assessments that require students to apply knowledge and skills to novel contexts.	M

Partial Meets | Score 1/2

The materials partially meet the criteria for this indicator. Some materials include a variety of TEKS-aligned and developmentally appropriate assessment tools.

Materials include a range of diagnostic, formative, and summative assessments to assess student learning in a variety of formats. Some materials assess all student expectations over the breadth of the course and indicate which student expectations are being assessed in each assessment. Materials include assessments that integrate scientific concepts and science and engineering practices with recurring themes and concepts. Materials include assessments that require students to apply knowledge and skills to novel contexts.

Evidence includes but is not limited to:

Materials include a range of diagnostic, formative, and summative assessments to assess student learning in a variety of formats.

- The materials provide Interactivities that assess student knowledge via games or activities. Teachers can use them to assess the content they may need extra help with. The materials also provide quizzes that are formatted similarly to STAAR and are developmentally appropriate based on the TEKS.
- The Interactives are formatted in a variety of ways that engage students and test their knowledge of concepts in a gamified format. Students can receive immediate feedback on their responses. Materials also provide a formative assessment 5-question quiz that is formatted in STAAR-like questions for each unit. The quiz can be used to assess student learning of concepts.
- Materials include informal and formative assessments in a variety of formats to assess student learning and determine the next steps. For example, Journal Prompts can be used as an informal “exit ticket” or more formal written journal entry to assess and gauge student learning. Each TEK includes at least one journal prompt that can be found at the end of the Instructional Module Companion (IMC). In 6th grade, the curriculum includes an additional nine separate journal prompts that can be used. Materials include formative assessments in a variety of formats to assess student learning and determine the next steps. The 6th-grade curriculum includes 12 (out of 20) science content-specific Reader activities that could be used as a formative assessment.

At the end of each Reader, students answer five questions: three STAAR-like multiple choice, one text entry, and a short constructed response.

- The Interactives provided by EduSmart include a formative assessment that provides an informal opportunity to assess student learning. The Interactives allow students to engage with "STAAR-like item types such as drag and drop, text-entry, hot spot, and multi-select. The Interactivity is a gamified version of the standard that allows students to engage with content related to a real-world scenario. Students receive immediate feedback on their progress and can attempt the interactivity multiple times. The interactivity can be used as a review activity before an assessment, as a formal assessment, or as a small group activity. It can be assigned individually or whole group as well."
- EduSmart provides review opportunities for students, which provides students an informal opportunity to assess their learning. "The student review is a condensed version of the instruction module, highlighting the most important concepts for review. The student reviews also feature integrated questions throughout the video review that students must answer before they can continue with the video. Students are given immediate feedback and can repeat this activity as needed for mastery or review."

Materials assess all student expectations over the breadth of the course and indicate which student expectations are being assessed in each assessment.

- EduSmart combines TEKS in some units. As a result, not all of the TEKS are assessed. For example, TEKS 6.11AB Quiz has five questions to assess 6.11A but does not include questions to assess 6.11B.
- Materials assess some, but not all, student expectations. In the digital quiz, student expectations (TEKS) are identified for each question; however, the same indicators are not available in the print version or for reference in the teacher answer key.
- EduSmart materials are organized by individual TEKS, with a few at each grade level that are combined, like 6.11A and 6.11B. Due to the organization of the digital curriculum, each activity is TEK-specific, and the Engineering Design Challenges identify SEPs and RTCs that they incorporate as well.
- EduSmart provides quizzes that assess some, not all, student expectations and indicates which student expectations are being assessed for each question in the digital quiz for the teacher to view.

Materials include assessments that integrate scientific concepts and science and engineering practices with recurring themes and concepts.

- The materials include activities that integrate Science and Engineering Practices (SEPs) with the Recurring Themes and Concepts (RTCs). The Engineering Design Challenges explicitly label the SEPs and RTCs in the activities.
- EduSmart's readers include assessments that require students to apply knowledge and skills to novel contexts by connecting the standard to a real-world scenario and using a 5-question assessment that requires students to apply their knowledge to a novel context. An example is the 6.7AB reader, in which students apply their knowledge of force to ski jumping. EduSmart incorporates one example of each of the themes. For example, the reader contains assessment questions specifically designed to focus on that theme for that specific content.
- Materials include activities that integrate scientific concepts and SEPs with RTCs. For example, the materials say, ".... the science investigation activities are virtual lab simulations that

incorporate recurring themes and concepts with science and engineering practices." Each grade level includes four Engineering Design Challenges that require students to apply science content with engineering practices and recurring themes and concepts. The corresponding SEPs and RTCs can be located in the Teacher Edition of the Engineering Design Challenge.

- The Engineering and Design Challenges provide a rubric to be used as an assessment of their product that assesses these standards. For example, in the rubric for a 6th-grade Engineering and Design Challenge called "Molybdenum Matters!", the rubric includes criteria for Design (standards 6.1A, 6.2B, 6.1G, and 6.5F), presentation (6.2D, 6.3B, 6.3C, 6.5F), model (6.1G, 6.3A, 6.5F), and construction (6.1B, 6.3A, 6.3B).
- EduSmart also provides Journal activities that give open-ended questions and opportunities for students to explain their reasoning. Within these journal prompts, the science and engineering practices as well as recurring themes and concepts, are embedded. For example, in a 6th-grade journal prompt on metals and nonmetals, the student is given a description of an unknown substance and must identify which group it belongs to and explain their answer. The student must identify and apply patterns to understand and connect scientific phenomena (6.5A) and develop explanations supported by data that is consistent with scientific ideas, principles, and theories (6.3A). They also have to communicate their explanation individually in a variety of settings and formats (6.3B).

Materials include assessments that require students to apply knowledge and skills to novel contexts.

- TEduSmart's readers include assessments that require students to apply knowledge and skills to novel contexts by connecting the standard to a real-world scenario and using a 5-question assessment that requires students to apply their knowledge to a novel context. An example is the 6.7AB reader, in which students apply their knowledge of force to ski jumping. The Interactives in EduSmart embed assessments that contain various assessment types, including drag and drop and multi-select, as students apply their content knowledge in a gamified platform to review science content.
- Materials include formative assessments that require students to apply knowledge and skills to novel contexts. The readers are "high quality, high interest leveled readers that connect the TEKS to a real-world scenario or problem." At the end of each Reader activity, students answer five questions to assess their understanding and application of the information. In 6.5E reader "Conservation of Matter and Energy," students answer a short, constructed response to explain what changes happen to matter as a hillside erodes during and after a rainstorm and how the total amount of matter remains the same.
- Materials also include assessments that require students to apply knowledge and skills to novel contexts. Journal prompts serve as an avenue for students to reflect on their learning, connect scientific principles to real-life scenarios, and demonstrate their grasp of scientific ideas. In 6.9AB Journal 2 - The Sun, Moon, and Earth, students make a connection between the phases of the Moon and when the Sun's gravity has the greatest effect on Earth's oceans and why.
- The EduSmart readers include questions that require students to apply the knowledge and skills they learned from the reader and the classroom to the novel context of the information in the reader. For example, in 6th grade, a reader called "Atoms, Elements, Compounds, and Mixtures" has five questions on a worksheet related to the text they read about atoms, elements, compounds, and mixtures. The questions are not straight from the reading itself but rather from a novel context in which students must apply what they learned from the reading to answer the question. Additionally, EduSmart provides Journal activities that prompt students to answer and explain their conclusions to questions that require the students to apply knowledge and skills to

novel contexts. For example, in 6th grade, there is a journal prompt about the rock cycle where students must describe the differences between compaction and cementation in the formation of sedimentary rock. The students had to apply their knowledge of the rock cycle to be able to answer the question.

EduSmart Science Grade 6

Indicator 6.2

Materials include guidance that explains how to analyze and respond to data from assessment tools.

1	Materials include information and/or resources that provide guidance for evaluating student responses.	M
2	Materials support teachers' analysis of assessment data with guidance and direction to respond to individual students' needs, in all areas of science, based on measures of student progress appropriate for the developmental level.	M
3	Assessment tools yield relevant information for teachers to use when planning instruction, intervention, and extension.	M
4	Materials provide a variety of resources and teacher guidance on how to leverage different activities to respond to student data.	M

Meets | Score 2/2

The materials meet the criteria for this indicator. Materials include guidance that explains how to analyze and respond to data from assessment tools.

Materials include information and/or resources that provide guidance for evaluating student responses. Materials support teachers' analysis of assessment data with guidance and direction to respond to individual students' needs, in all areas of science, based on measures of student progress appropriate for the developmental level. Assessment tools yield relevant information for teachers to use when planning instruction, intervention, and extension. Lastly, materials provide a variety of resources and teacher guidance on how to leverage different activities to respond to student data.

Evidence includes but is not limited to:

Materials include information and/or resources that provide guidance for evaluating student responses.

- The materials provide sample responses for Claim Evidence Reasoning (CER) simulations to help when evaluating student responses to the lab. Materials provide a Teacher Edition ofsimulations and hands-on activities. This provides possible answers to the questions students complete throughout the activity.
- EduSmart provides an instructional unit teacher guide that gives background information for the teacher, including prerequisite knowledge of students, misconceptions, essential questions, and sample answers for the essential questions. The teacher can use the Unit Teacher Guide to guide them in evaluating student responses. EduSmart provides an Instructional Module(IM) and an Instructional Companion (IMC). The teacher can use the teacher version of the Instructional Module Companion as a guide when evaluating student responses on the Instructional Module Companion.
- Materials include resources that provide guidance for evaluating student responses. Each of the simulations and hands-on activities comes with a teacher edition, which provides possible answers to the questions students complete throughout the activity. Materials also include information that provides guidance for evaluating student responses. Forach unit includes a teacher's guide, which includes essential questions students should be able to answer at the end of the unit. The teacher's guide also provides answers to the questions (and common

misconceptions) to help teachers provide guidance and evaluate student responses to the essential questions. Materials include resources that provide guidance for evaluating student responses. For example, each Engineering Design Challenge has a scoring rubric to assess students' work.

- EduSmart provides teacher versions of Engineering and Design challenges that provide a rubric for guidance on evaluating student products. The teacher version also guides discussion, design analysis, and product discussion. EduSmart provides teacher guidance on essential questions found for each unit within the Scope and Sequence in the Unit Teacher Guide. The Unit Teacher Guide provides exemplars to help teachers evaluate student responses to the essential questions for the unit of study.

Materials support teachers' analysis of assessment data with guidance and direction to respond to individual students' needs, in all areas of science, based on measures of student progress appropriate for the developmental level.

- EduSmart provides an implementation strategies document that guides teachers on how to effectively use their resources to support individual student needs. EduSmart provides reports that teachers can use to analyze assessment data from students. Teachers can monitor the progress of individual students on their quizzes and various assignments within EduSmart. Teachers can use this information to guide and direct students as they progress throughout each unit.
- Materials provide an Implementation Strategies Guide to help teachers effectively use the resources available throughout the EduSmart curriculum. Once teachers review student progress in the activity reports, they will be able to customize the work each student is required to complete as they continue to develop their content knowledge based on the suggestions in the Implementation Strategies Guide.
- EduSmart provides guidance and direction to respond to students' needs based on measures of student progress with their Implementation Strategies Guide. The guide gives support for teachers by providing differentiation strategies, groupings, assignment applications, and explanations of how to use each of their activities with students either individually, virtually, or as small groups or whole groups. It also provides a paragraph on how to support students who are accelerated learners or learners who require additional support.

Assessment tools yield relevant information for teachers to use when planning instruction, intervention, and extension.

- The materials provide detailed assessment reporting, progress monitoring, and quick reteach features to meet individual student needs
- EduSmart's assessment tools yield relevant information for teachers to use when planning instruction, intervention, and extension. This assessment tool can provide detailed information on student performance, including questions missed, the number of minutes used, and student answer choices. EduSmarts assessment monitoring tools can track student performance on specific skills or concepts, as well as track student overall growth. This will allow teachers to monitor individual student progress throughout the unit and, over time, plan appropriate instruction to meet their needs.
- EduSmart assessment tools yield relevant information for teachers to use when planning instruction, intervention, and extension. Teachers have access to reports to be able to see

student performance on assignments and quizzes and also a quick glance to see how many of the assigned activities have been completed by each student. EduSmart assessment tools provide reports detailing questions missed, students' answers, explanations for the correct answer, and the amount of time spent on the activity.

- EduSmart provides assessment tools that provide data to teachers that give relevant information for them to use to plan instruction, intervention, and extension for students. Teachers can pull a variety of reports that yield this information in the View Reports section of the My Groups on their website.

Materials provide a variety of resources and teacher guidance on how to leverage different activities to respond to student data.

- The Implementation Strategies document provides guidance on how to use the resources to support students and respond to individual student needs. The platform allows teachers to assign work that is differentiated and based on a student's need (struggling or excelling).
- EduSmart provides a variety of resources and teacher guidance on how to leverage different activities to respond to student data using the Implementation Strategies Guide. The Implementation Strategies Guide provides teachers with guidance on how to use various resources to support student learning and respond to individual student needs based on data.
- EduSmarts assessment monitoring tools can track student performance on specific skills or concepts, as well as track student overall growth. This will allow teachers to monitor individual student progress throughout the unit and, over time, plan appropriate instruction using the resources provided within EduSmart to target students' needs based on data.
- Materials provide a variety of resources for teachers to use in responding to student performance data. Each grade level has access to an Implementation Strategies Guide, which describes each of the activities available in the EduSmart digital platform and how they can be used to help students work towards mastery of science concepts. Materials also provide teacher guidance on how to respond to student data. Teachers can access individual or class data to determine student understanding of a specific question, idea, or concept. Teachers can use the data to create small groups and assign additional reteach or extension based on individual student progress in the content.
- EduSmart provides an Implementation Strategies Guide that provides guidance for teachers on how to leverage different activities to respond to student needs. For example, the guide for the Anchoring Phenomenon activity states, "Have students discuss the phenomenon in small groups or pairs before facilitating whole group discussion to support ELL students as well as students requiring extra processing time or student talk." EduSmart provides the ability for teachers to create groups to assign students so they may leverage different activities and respond to student data. Teachers can assign different resources to students based on their needs and group students according to these needs as well. In this manner, teachers can use the student data and create intervention, extension, and extra help opportunities for students.

EduSmart Science Grade 6

Indicator 6.3

Assessments are clear and easy to understand.

1	Assessments contain items that are scientifically accurate, avoid bias, and are free from errors.	M
2	Assessment tools use clear pictures and graphics that are developmentally appropriate.	M
3	Materials provide guidance to ensure consistent and accurate administration of assessment tools.	M
4	Materials include guidance to offer accommodations for assessment tools that allow students to demonstrate mastery of knowledge and skills aligned to learning goals.	M

Meets | Score 2/2

The materials meet the criteria for this indicator. Assessments are clear and easy to understand.

Assessments contain items that are scientifically accurate, avoid bias, and are free from errors. Assessment tools use clear pictures and graphics that are developmentally appropriate. Materials provide guidance to ensure consistent and accurate administration of assessment tools. Materials include guidance to offer accommodations for assessment tools that allow students to demonstrate mastery of knowledge and skills aligned to learning goals.

Evidence includes but is not limited to:

Assessments contain items that are scientifically accurate, avoid bias, and are free from errors.

- The materials provide quizzes that address the TEKS in a scientifically correct manner. The questions cover the full range of the Depth of Knowledge (DOK), avoid bias, are free from errors, and are straightforward.
- The materials also provide reviews that can be used as informal assessments or checks for understanding. These contain 3-5 content content-related questions that are straightforward, scientifically accurate, and free from errors. An example is the 6.12C Levels of Organization quiz; the questions cover the range of the Depth of Knowledge and provide straightforward questions that avoid bias and are free from errors.
- EduSmart also provides assessment questions to accompany the readers. Those assessment questions are scientifically accurate, avoid bias, and are free from errors. An example is 6.13A, The Cell Theory reader, which contains five assessment questions to accompany the reader to measure mastery.
- Another example of the nature of assessment questions is the 6.13A Cell Theory Quiz. It includes ten questions about the history and key components of cell theory, which are straightforward to avoid bias, assess varying levels of understanding, and are free from errors.

Assessment tools use clear pictures and graphics that are developmentally appropriate.

- The material uses clear pictures and graphics. For example, the 6.13B Characteristics of Organisms Quiz includes clear pictures to supplement question 2, which asks students to identify the structure that would decide if the cell is prokaryotic or eukaryotic. Furthermore, the

materials provide student reviews that use clear pictures and graphics that are developmentally appropriate and appropriate for the course. In 6.13B, Characteristics of Organisms, the student review guides the students through a summary of the instructional module, hitting all the key points. The graphics and pictures used are developmentally appropriate and clear for 6th-grade students to use and understand the concepts.

- EduSmart's quizzes feature pictures that are large enough to be able to be seen clearly. The images are also developmentally and course-appropriate. For example, the 6.6C metals, nonmetals, and metalloids quiz contains pictures that are clear and appropriate. EduSmart's student reviews use clear pictures and graphics that are developmentally appropriate and appropriate for the course. For example, in 6.12AB Interrelationships Between Organisms, the student review guides the students through a summary of the instructional module, hitting all the key points. The graphics and pictures used are developmentally appropriate and clear for 6th-grade students to use and understand the concepts.
- Another example is in the 6.6B Pure Substances and Mixtures Quiz, which includes clear pictures to supplement question 3, which asks about the cause of windshields and grass being wet on some mornings, even if it didn't rain during the night.
- Material assessment tools also use pictures and graphics that are developmentally appropriate for the grade level. For example, the 6.6D Relative Density Quiz provides multiple simple pictures for students to interpret to choose the best answer to the question.
- The EduSmart quizzes have pictures that are easy to read and that relate to the question. EduSmart also provides assessment tools that use clear pictures and graphics that are developmentally appropriate. For example, their Interactivities provide interactive graphics and pictures that allow students to assess their understanding of the concept.

Materials provide guidance to ensure consistent and accurate administration of assessment tools.

- The EduSmart materials provide the implementation strategies guide that helps teachers through the process of administering student quizzes and reviews. They also provide an implementation strategies guide that helps teachers through the process of administering student reviews
- EduSmart's materials guide ensures consistent and accurate administration of assessment tools. EduSmart's implementation strategies guide provides teachers with guidance on administering student quizzes. The materials provide guidance to ensure consistent and accurate administration of assessment tools. For example, the Implementation Strategies document provides details on which activities can be used as formal or informal assessment tools throughout a unit. Materials guide the EduSmart quiz answer keys. The answer key not only provides the correct answer but an explanation for why it is the correct answer based on the content taught in the Instructional Modules and other supporting activities.
- EduSmart provides materials that provide guidance to ensure consistent and accurate administration of assessment tools. EduSmart provides teachers with an Implementation guide that gives examples of how to use their activities as formal and informal assessments and how to use each activity along with suggestions and time lengths. EduSmart provides materials that provide guidance to ensure consistent and accurate administration of assessment tools. Each Engineering and Design Challenge has a rubric that helps the teacher ensure consistent and accurate administration of the challenge to students and how to grade each challenge. EduSmart also provides materials that provide guidance to ensure consistent and accurate administration of assessment tools. EduSmart provides Teacher Versions for certain activities to allow for consistent grading and accurate administration of assessment tools and activities.

EduSmart Science Grade 6

Materials include guidance to offer accommodations for assessment tools that allow students to demonstrate mastery of knowledge and skills aligned to learning goals.

- The materials provide text-to-speech options for all assessments as well as language support accommodations to allow all students to demonstrate mastery of the content. The materials provide text-to-speech options in all reader activities as well as language support as accommodations to allow all students to demonstrate mastery of the content.
- Each grade band of EduSmart has a correlating ELPS document that contains suggested accommodations for students to demonstrate mastery of knowledge and skills based on their English proficiency. For example, a suggested accommodation for teachers to utilize for students at the intermediate proficiency is to provide sentence stems with simple structures and tenses, and for the advanced high proficiency is to provide opportunities for extended discussions with students. EduSmart materials also include guidance to offer accommodations for assessment tools that allow students to demonstrate mastery of knowledge and skills aligned with learning goals. EduSmart quizzes feature text-to-speech options in all assessments as well as language support as accommodations to allow all students to demonstrate mastery of the content.
- EduSmart provides materials that include guidance to offer accommodations for assessment tools that allow students to demonstrate mastery of knowledge and skills. In each of their digital versions of quizzes, EduSmart provides text-to-speech for students who need it to assist them with answering questions to demonstrate mastery of knowledge and skills. EduSmart provides materials that include guidance to offer accommodations for assessment tools that allow students to demonstrate mastery of knowledge and skills with their Implementation Guide. This guide provides suggestions for teachers to accommodate students in their activities to allow them to demonstrate mastery of knowledge and skills for each science concept.

EduSmart Science Grade 6

Indicator 7.1

Materials include guidance, scaffolds, supports, and extensions that maximize student learning potential.

1	Materials provide recommended targeted instruction and activities to scaffold learning for students who have not yet achieved grade-level mastery.	M
2	Materials provide enrichment activities for all levels of learners.	M
3	Materials provide scaffolds and guidance for just-in-time learning acceleration for all students.	M

Meets | Score 2/2

The materials meet the criteria for this indicator. Materials provide recommended targeted instruction and activities to scaffold learning for students who have not yet achieved grade-level mastery.

Materials provide recommended targeted instruction and activities to scaffold learning for students who have not yet achieved grade-level mastery. Materials provide enrichment activities for all levels of learners. Materials provide scaffolds and guidance for just-in-time learning acceleration for all students.

Evidence includes but is not limited to:

Materials provide recommended targeted instruction and activities to scaffold learning for students who have not yet achieved grade-level mastery.

- The grade 6 Implementation Guide provides teacher guidance for differentiation using stations, ELPS strategies, and accelerated support. The grade 6 materials review, reteach, and spiral skills in the form of student reviews, interactivities, instructional module companions, and Word Explorer activities.
- EduSmart materials provide multiple opportunities for targeted instruction as they work towards mastery of the content. For example, if a student answers a question incorrectly within the Interactivity, the graphics and verbal explanations help support the student's better understanding of the content. Students are allowed multiple attempts to improve their scores.
- EduSmart materials primarily recommend scaffolded instruction through the use of small group stations to allow the teacher time to work one-on-one or within one of the groups to support students who have not yet reached mastery.
- EduSmart materials provide sentence stems through the ELPS Strategies document, which is accessible to all teachers and can be used for all students.
- EduSmart provides recommendations for targeted instruction within their Implementation Guide to help teachers scaffold learning for students who have not yet achieved mastery. For example, the Implementation Guide for the Instructional Module recommends:
    - a) Accelerated Learners remove the word bank for a more student-led experience.
    - b) Prefill the word or a portion of the word to support students as they take notes.
    - c) Number each sentence to help maintain organization.
    - d) Remove every other sentence to increase white space to give additional processing time as needed.

- EduSmart provides leveled readers to help students who have not yet reached mastery in the subject or are below reading level. Additionally, within these readers, students have the option to use text-to-speech accessibility.

Materials provide enrichment activities for all levels of learners.

- The implementation strategies document provides information to teachers for recommended activities to scaffold learning throughout the unit. Because the interactives and simulations are engaging activities in a gamified format, they could be used as enrichment activities for that unit.
- EduSmart materials provide enrichment activities for all levels of learning. The Implementation Strategies guide offers suggestions on station activities for students that can be used as enrichment or reinforcement for all students. EduSmart materials also provide enrichment activities for all levels of learners. For example, in the 6.7C Newton's Car Activity, students describe, plan, and implement an investigation by designing a car that moves without pushing or pulling it. As an extension, students have the option to research aerospace engineers.
- EduSmart provides opportunities for enrichment for levels of learners. Hands-on activities have an extension section that allows students to expand their knowledge of the scientific concept being studied. In 6th grade, the hands-on activity called Mystery Elements has an extension section that reads: "Find out about scientists who developed the periodic table. How is the periodic table useful to scientists today? What do we call scientists who use the Periodic Table?"
- EduSmart provides an Implementation Guide that suggests stations. Within one of the stations is a Makerspace option that would provide extension opportunities for all learners. Furthermore, the Implementation Guide has suggestions and explanations of each activity and a differentiated instruction portion that makes suggestions for how to engage students.

Materials provide scaffolds and guidance for just-in-time learning acceleration for all students.

- Grade 6 materials provide a scope and sequence and unit resource guide to help teachers prepare lessons. EduSmart allows teachers the ability to individualize instruction by assigning certain components or playlists to students based on their level of mastery. EduSmart provides an Implementation Guide for engaging in accelerated learning. The Implementation Guide that has this section states, "Below is suggested differentiation for accelerated learners and learners who require additional support." EduSmart also provides guidance for teachers to help them scaffold students within the lesson.
- The implementation strategies document provides information to teachers for recommended activities to scaffold learning throughout the unit. The unit teacher's guide provides a list of scaffolded essential questions that the teacher can use as a guide for student understanding of concepts.
- The grade level Scope and Sequence, in conjunction with the Unit Resource Guides and Implementation Strategies documents, allow the teacher to plan ahead for just-in-time learning acceleration for all students. Educators can use the unit's anchoring phenomena to engage students' prior knowledge and determine their level of understanding before determining the instruction flow for the unit and the educational materials that will be most impactful for the class. EduSmart's Learning Management System (LMS) allows educators to create a custom playlist of activities to individualize a student's learning experience. Educators can assign online learning activities for additional practice, reinforcement, or enrichment depending upon the

needs of the students. Activities can be completed on an individual basis or in small groups based on their educational needs.

EduSmart Science Grade 6

Indicator 7.2

Materials include a variety of research-based instructional methods that appeal to a variety of learning interests and needs.

1	Materials include a variety of developmentally appropriate instructional approaches to engage students in the mastery of the content.	M
2	Materials consistently support flexible grouping (e.g., whole group, small group, partners, one-on-one).	M
3	Materials consistently support multiple types of practices (e.g., modeled, guided, collaborative, independent) and provide guidance and structures to achieve effective implementation.	M
4	Materials represent a diversity of communities in the images and information about people and places.	M

Meets | Score 2/2

The materials meet the criteria for this indicator. Materials include a variety of research-based instructional methods that appeal to a variety of learning interests and needs.

Materials include a variety of developmentally appropriate instructional approaches to engage students in the mastery of the content. Materials consistently support flexible grouping (e.g., whole group, small group, partners, one-on-one). Materials consistently support multiple types of practices (e.g., modeled, guided, collaborative, independent) and provide guidance and structures to achieve effective implementation. Materials represent a diversity of communities in the images and information about people and places.

Evidence includes but is not limited to:

Materials include a variety of developmentally appropriate instructional approaches to engage students in the mastery of the content.

- EduSmart's Grade 6 materials include authentic tasks where students collect data, use multimodal texts, interactivities, concept maps, and hands-on activities that allow students to engage in the mastery of content. They also include Instructional Modules that include structured videos designed to support the instruction of specific scientific concepts and topics. "Each video has multiple breaks to facilitate student discussion – Whole class, Think-Pair-Share or note-taking."
- The Grade 6 materials provide an instructional strategies document that helps guide the teacher with suggestions to engage students in the mastery of the content. Grade 6 unit module materials contain a variety of activities to engage students in mastery of the content, such as simulations, interactives, as well as hands-on lab experiences.
- EduSmart materials include a variety of developmentally appropriate instructional approaches to engage students in the mastery of the content. Examples within EduSmart include, but are not limited to, video clips to introduce or reinforce science concepts, authentic hands-on activities, education game-based simulations for learning, connections to real-world situations, and opportunities to design and problem solve.

- The materials provide other developmentally appropriate instructional approaches to engage students in mastery of science concepts and content. These activities include authentic tasks. For example, in 6th grade, students can do Engineering and Design Challenges that are connected to real-life problems and situations that students must present a solution to, using the engineering and design process and skills.

Materials consistently support flexible grouping (e.g., whole group, small group, partners, one-on-one).

- The Implementation Guide provides teachers with suggestions for using hands-on activities individually, in small groups, or with partners. It is also suggested that student reviews be used in small groups for a teacher-led reteach. The Implementation Guide also provides teachers with suggestions for using readers as a whole group, small group or individually.
- The Implementation Guide supports flexible groupings by suggesting opportunities where student groups can be changed. EduSmart provides flexible grouping opportunities throughout each unit. These opportunities could include: the anchoring phenomena, the Instructional module, and the hands-on activities. The Instructional Module for 6.7AB Forces acting on Objects can be used for whole groups or assigned virtually for small groups or individuals
- EduSmart materials support flexible grouping. The Implementation Strategies Guide provides the educator with guidance on grouping options for each of the main components of the EduSmart curriculum. For example, the Implementation Strategies Guide recommends that the Student Review is “great for small group intervention setting for teacher-led reteach or review.” EduSmart LMS allows the teacher to group students and assign work based on their learning needs. Teachers have the ability to easily move students from one group to another as students develop their scientific understanding throughout the unit.
- EduSmart provides an Implementation Strategies document that gives guidance on different flexible groupings. For example, the Implementation Strategies document states how to use groupings within each of their activities. Additionally, EduSmart provides materials that lend themselves to grouping opportunities. For example, according to the Implementation Guide, the Anchoring Phenomenon activities allow the teacher to “Have students discuss the phenomenon in small groups or pairs before facilitating whole group discussion to support ELL students as well as students requiring extra processing time or student talk.” The Implementation Guide also suggests that Instructional Modules “can be used with the whole group or assigned virtually for small groups or individuals” and “each video has multiple breaks to facilitate student discussion – Whole class, Think-Pair-Share or note-taking.”

Materials consistently support multiple types of practices (e.g., modeled, guided, collaborative, independent) and provide guidance and structures to achieve effective implementation.

- EduSmart materials provide multiple types of practice (e.g., note-taking, hands-on activities, engineering design challenges, online simulations) that appeal to a variety of learning interests and needs. Educators will need to simultaneously use the Teacher Unit Guide, grade level Scope and Sequence, and Implementations Strategies Guide to ensure the successful implementation of a variety of research-based instructional strategies.
- EduSmart provides an Implementation Strategies Guide that, when used with the grade level Scope and Sequence, provides the guidance and structure needed to achieve effective implementation.
- EduSmart provides a teacher version of all hands-on activities, as well as rubrics for providing feedback to students. For example, the teacher version for the hands-on activity for TEKS 6.6D

Layering the Unknown states the specific objective for the activity as "The objective of this activity is for students to learn that liquids have a property that causes some liquids to layer on top of others. This is best done as an assessment probe before teaching density." Additionally, the teacher version provides analysis questions and prompts the teacher to ask the questions if students are working or to assign them after students have completed the hands-on activity.

Materials represent a diversity of communities in the images and information about people and places.

- EduSmart materials provide diversity as seen in the anchoring phenomena images and graphics representing a diverse group of people and places. SEP and RTC readers depict images and graphics that represent a diverse group of people and places.
- EduSmart materials provide diversity throughout the choice of images it uses within its product. EduSmart also provides diversity in the types of activities chosen that appeal to a diverse group of students and their interests.
- EduSmart's Anchoring Phenomena represents a diversity of communities in the images and information about people and places. EduSmart's Readers represent a diversity of communities in the images and information about people and places.
- EduSmart provides materials that represent diverse communities and use images and information that are respectful and inclusive. For example, their instructional modules provide videos that represent diverse groups of people and include male and female representations, and they represent diverse backgrounds, including different races, ethnicities, and nationalities. Furthermore, EduSmart provides materials that represent diverse communities and uses graphics and information that are respectful and inclusive. For example, the readers and anchoring phenomena activities provide videos, graphics, and examples that are inclusive of various genders, groups, ethnicities, and nationalities.

EduSmart Science Grade 6

Indicator 7.3

Materials include listening, speaking, reading, and writing support to assist emergent bilingual students in meeting grade-level science content expectations.

1	Materials include guidance for linguistic accommodations (communicated, sequenced, and scaffolded) commensurate with various levels of English language proficiency as defined by the ELPS.	M
2	Materials encourage strategic use of students' first language as a means to linguistic, affective, cognitive, and academic development in English.	M

Meets | Score 2/2

The materials meet the criteria for this indicator. Materials include listening, speaking, reading, and writing support to assist emergent bilingual students in meeting grade-level science content expectations.

Materials include guidance for linguistic accommodations (communicated, sequenced, and scaffolded) commensurate with various levels of English language proficiency as defined by the ELPS. Materials encourage strategic use of students' first language as a means to linguistic, affective, cognitive, and academic development in English.

Evidence includes but is not limited to:

Materials include guidance for linguistic accommodations (communicated, sequenced, and scaffolded) commensurate with various levels of English language proficiency as defined by the ELPS.

- The materials include an ELPS Strategies Guide that describes how to implement the ELPS (Beginner, Intermediate, Advanced, and Advanced High) using EduSmart for the following components: 1- Anchoring phenomenon accommodations for listening and speaking include graphic organizers, conversation stems, think,pair, share, and word banks; 2- Instructional Module and Companion accommodations for listening, speaking, reading, and writing include pre-teaching vocabulary, conversation stems, think, pair, share, use native tongue, provide linguistic support with editable IMC, and peer collaboration on graphic organizers and journal prompts; 3- Readers accommodations for reading and writing include text-to-speech, pre-teaching vocabulary, conversation stems, think, pair, share, and assign reader based on reading level; 4- Hands-On Activities and Lab accommodations for listening, speaking, reading, and writing, include pre-teaching vocabulary, conversation stems, think, pair, share, teacher demonstrating the steps, simplify language, peer support and interaction as seen in my previous piece of evidence.
- The materials suggest linguistic accommodations throughout the lesson. In the unit teacher's guide, it lists which skills are highlighted in which activities. For example, Speaking – Anchoring Phenomenon, Instructional Module, activities, CER. Listening – Instructional Module, Science Investigation Activities, Student Review, Interactivities, activities. Writing – Instruction Module Companion, Journal prompts, Science Investigation, activities with CER or lab data form, activities, Readers. Reading – Instruction Modules, Instruction Module Companions, Readers,

activities, Word Explorer. Furthermore, materials suggest the use of graphic organizers to classify information, order steps in a process, or scaffold written tasks.

- ELPS Strategies Guides provides sentence stems for EB students on four levels: beginner, intermediate, advanced, and advanced high. Sentence stems are provided for various components of speaking and writing in science: generating questions, conducting experiments, and analyzing results from experiments. EduSmart materials also provide an ELPS Strategies Guide to provide guidance for linguistic accommodations for students with various levels of English language proficiency. The ELPS Strategies Guide provides activity-specific guidance on how to support EB students while they listen, speak, read, and write.
- EduSmart provides an ELPS Implementation Guide that includes guidance for linguistic accommodations for their materials for each level of English language proficiency as defined by the ELPS. For example, Hands-On Activities and Labs says, "EduSmart's activities are inquiry-based hands-on labs, investigations, application practice, and research. These activities focus on listening, speaking, reading, and writing." They have a chart that goes through each level of ELPs for each skill: Listening, Speaking, Reading, and Writing. They also provide techniques overall that could apply to students who are emergent bilingual: "The following are some strategies and techniques that can be used with hands-on activities:
    - Pre-teach vocabulary
    - Edit the student documents to provide additional support through simplifying language or instructions
    - Provide sentence stems for reflections
    - Teacher demonstrates the steps for the activity
    - Provide word banks or glossaries
    - Provide verbal and visual instructions
    - Allow the student to use native language
    - Peer support and interaction

Materials encourage strategic use of students' first language as a means to linguistic, affective, cognitive, and academic development in English.

- The ELPS Strategies guideencourage teachers to allow students to use native language. Additionally, according to the ELPS Strategies guide, it is encourages to allowing students to follow along to the instructional module with closed captioning.
- In the ELPS strategies document for each unit, EduSmart includes suggestions for teachers about when it is appropriate to use native language supports. During the anchoring phenomena, readers, hands-on activities, and IM/IM Companion, EduSmart suggests allowing the student to use their native language.
- Materials encourage strategic use of students' first language as a means to support their development of English and meet grade-level science content expectations. The ELPS Strategies Guide makes this recommendation for all activities with EB students at the "beginners" level.
- EduSmart provides encouragement of first language usage for students within their ELPS Implementation Guide. For example, "The following are some strategies and techniques that can be used with the instructional module and instructional module companion: Allow the student to use native language." EduSmart also provides encouragement of first language usage for students within their ELPS Implementation Guide. The teachers would need to use this guide in conjunction with each of the activities provided in order to successfully implement the use of the student's native language.

EduSmart Science Grade 6

Indicator 7.4

Materials provide guidance on fostering connections between home and school.

1	Materials provide information to be shared with students and caregivers about the design of the program.	M
2	Materials provide information to be shared with caregivers for how they can help reinforce student learning and development.	M
3	Materials include information to guide teacher communications with caregivers.	M

Meets | Score 2/2

The materials meet the criteria for this indicator. Materials provide guidance on fostering connections between home and school.

Materials provide information to be shared with students and caregivers about the design of the program. Materials provide information to be shared with caregivers for how they can help reinforce student learning and development. Materials include information to guide teacher communications with caregivers.

Evidence includes but is not limited to:

Materials provide information to be shared with students and caregivers about the design of the program.

- EduSmart features a caregiver letter that explains the design of EduSmart, how it is used in the classroom, and how it can be used at home to reinforce a student's learning.
- EduSmart provides a communication document that can be used to help guide teachers in ways they can effectively communicate with caregivers. It provides a list of suggested methods to communicate with caregivers.
- The letter to caregivers says, “The curriculum is designed to provide an engaging, interactive way for your children to explore science topics and develop a deeper understanding of science concepts.” It also states, “EduSmart is designed to provide a wide range of tools to help your student track their progress, such as an interactive dashboard that displays their scores and allows them to re-try any tricky assignments and together you can go over any question they did not understand if you choose to do so. This will help them understand their strengths and weaknesses and provide an idea of which topics they should focus on.”
- The Teacher Communication Guide states, “communication with parents and caregivers is essential to developing student success and mastery for science content.” The Teacher Communication Guide also provides four suggested methods for teachers to communicate at home: progress reports, parent access, student portfolios, and a classroom newsletter.

Materials provide information to be shared with caregivers for how they can help reinforce student learning and development.

- EduSmart materials include a letter to caregivers that provides information on how they can help reinforce student learning and development from home. The letter provides space for

student information for logging into the EduSmart dashboard at home to share what they are currently learning and how they performed on previous assignments and activities. Students are encouraged to "... share what they have learned from class as it increases their memory!"

- The letter also provides possible conversation starters to help caregivers engage their children in conversation about what they are currently learning in science. The conversation starters help reinforce what the student has learned at school while also involving the caregiver in their learning.
- The EduSmart Caregiver letter gives information about their program and what students will experience on the platform. Some of EduSmart's hands-on activities provide a Home Connection section. In a 6th-grade activity, the home connection states: "Discuss your research and findings with your caregivers at home. Ask if there are any personal impacts that Marie Curie's work may have had on your household, such as a relative being treated for cancer with radiation or memories of the nuclear arms race or cold war. Be ready to share your personal impact stories with the class." This statement is directed at the student to share with the people in their household and doesn't necessarily help caregivers reinforce students' learning and development in the program.
- EduSmart materials also include a "Teacher Communication Guide" that recommends regular progress reports to send home to caregivers. "The information will provide them with the academic progress of the student and allow them to view which areas their students are progressing in or which areas they are still developing. The materials also encourage parent access to reinforce learning at home by allowing the parents to learn alongside their children. Parents should be encouraged to review the Instructional Modules to understand the science content and have conversations with their students at home about what they are learning in the classroom. Parents are also encouraged to access the Readers to "... engage in reading aloud to their child at home."

EduSmartMaterials include information to guide teacher communications with caregivers.

- The platform provides a way for teachers to share a student's report with caregivers (printed or digitally using a screenshot). Materials provide a Teacher Communication Guide to help effectively communicate with caregivers.
- EduSmart provides a way for teachers to print a student report from their dashboard to send home to caregivers or to use as a reference in communication with caregivers.
- EduSmart materials include a "Teacher Communication Guide" that states, "Communication with parents and caregivers is essential to developing student success and mastery for science content." The Teacher Communication Guide also provides four suggested methods for teachers to communicate at home: progress reports, parent access, student portfolios, and a classroom newsletter. "By using these potential methods of communication, teachers can help build relationships with families as well as provide opportunities to work together to support the student's academic development through using EduSmart's content and learning platform."
- The Teacher Communication Guide also suggests a variety of methods to help guide teacher communications with caregivers.

EduSmart Science Grade 6

Indicator 8.1

Materials include year-long plans with practice and review opportunities that support instruction.

1	Materials are accompanied by a TEKS-aligned scope and sequence outlining the order in which knowledge and skills are taught and built in the course materials.	M
2	Materials provide clear teacher guidance for facilitating student-made connections across core concepts, scientific and engineering practices, and recurring themes and concepts.	M
3	Materials provide review and practice of knowledge and skills spiraled throughout the year to support mastery and retention.	M

Meets | Score 2/2

The materials meet the criteria for this indicator. Materials include year-long plans with practice and review opportunities that support instruction.

Materials are accompanied by a TEKS-aligned Scope and Sequence outlining the order in which knowledge and skills are taught and built in the course materials. Materials provide clear teacher guidance for facilitating student-made connections across core concepts, scientific and engineering practices, and recurring themes and concepts. Materials provide review and practice of knowledge and skills spiraled throughout the year to support mastery and retention.

Evidence includes but is not limited to:

Materials are accompanied by a TEKS-aligned Scope and Sequence outlining the order in which knowledge and skills are taught and built in the course materials.

- Materials include a comprehensive TEKS-aligned Scope and Sequence located on the Teacher Resources tab. This document outlines the order in which knowledge and skills are taught and built in the course materials for grade 6. The Scope and Sequence include the reporting category for the TEKS, the unit, suggested days, essential questions, new grade-level words, words with prior knowledge, suggested Scientific and Engineering Practices (SEPs), and Recurring Themes and Concepts (RTCs) connections, and possible activities aligned with each standard.
- The material includes a Vertical Alignment Tool that identifies each grade level TEKS, including grade 6. The tool located on the teacher resources tab links the concepts progressively across grade 6 through Biology. This tool clearly shows how science content will be spiraled and built upon over the course of the year and through Biology. The Vertical Alignment Tool also includes SEPs and RTCs.
- Materials include a 5E filter that allows teachers to use a 5E model set up to outline the order in which knowledge and skills are taught for a particular standard.

Materials provide clear teacher guidance for facilitating student-made connections across core concepts, scientific and engineering practices, and recurring themes and concepts.

- Grade 6 materials include background information, prior knowledge, common misconceptions, and essential questions in the Unit Teacher Guides for each standard under teacher resources. The Scope and Sequence document provides clear guidance for teachers to help students make

connections to core concepts. Teachers can refer back to this document when helping students make connections across the core concepts, SEPs, and Recurring Themes and Concepts.

- Teachers can access the Implementation Strategies document in the Teacher Resources tab for guidance. The materials provide clear teacher guidance on implementation. For example, the Implementation Strategies document includes anchoring phenomenon examples to facilitate student-made connections. The material includes teacher guidance for RTCs across all grade levels. Teachers can reference a recurring concept and view teacher resources, instructions, hands-on activities, and vocabulary and literacy. Grade 6 materials provide grade-level appropriate activities for 6.5(A), Patterns, a recurring concept.
- Materials provide an Implementation Guide for teachers that provides guidance for facilitating connections across core concepts. The guide includes strategies for “anchoring phenomena” and has instructional modules, readers, etc. The Scope and Sequence document connects the SEPs and RTCs TEKS to the core content standards.

Materials provide review and practice of knowledge and skills spiraled throughout the year to support mastery and retention.

- Grade 6 materials include new grade-level words with prior knowledge in the Scope and Sequence document. EduSmart provides connections and suggestions for the SEPs and RTCs throughout the year. In the vertical alignment document, teachers see what standards spiral from previous grade levels. The Scope and Sequence documents are provided for each grade level. Within these documents, teachers are able to identify when standards are taught, including SEPs and RTCs TEKS addressed in each unit. This document allows standards to spiral.
- Teachers can reference the Unit Teacher Guide for prerequisite knowledge that students will need prior to beginning the unit. The prerequisite may be science content or skills from previous years or from early in the same grade level. The Teacher Guides have previous and new vocabulary, which is evidence of spiraling.
- Teachers can view each unit by the 5Es. On the homepage for each unit, there is a toggle to allow teachers to switch between Resource Type or 5E Model. Here is where the Secondary Teacher Implementation Guide describes interactivities as formative assessments that are “... gamified for high student engagement.” The Implementation Strategies document clearly describes the activities to ensure students have opportunities to review and practice knowledge and skills spiraled throughout the year to support mastery and retention.

EduSmart Science Grade 6

Indicator 8.2

Materials include classroom implementation support for teachers and administrators.

1	Materials provide teacher guidance and recommendations for use of all materials, including text, embedded technology, enrichment activities, research-based instructional strategies, and scaffolds to support and enhance student learning.	M
2	Materials include standards correlations, including cross-content standards, that explain the standards within the context of the grade level.	PM
3	Materials include a comprehensive list of all equipment and supplies needed to support instructional activities.	M
4	Materials include guidance for safety practices, including the grade-appropriate use of safety equipment during investigations.	M

Partial Meets | Score 1/2

The materials partially meet the criteria for this indicator. Materials include some classroom implementation support for teachers and administrators.

Materials provide teacher guidance and recommendations for use of all materials, including text, embedded technology, enrichment activities, research-based instructional strategies, and scaffolds to support and enhance student learning. Materials include some standards correlations, including cross-content standards, that explain the standards within the context of the grade level. Materials include a comprehensive list of all equipment and supplies needed to support instructional activities. Materials include guidance for safety practices, including the grade-appropriate use of safety equipment during investigations.

Evidence includes but is not limited to:

Materials provide teacher guidance and recommendations for use of all materials, including text, embedded technology, enrichment activities, research-based instructional strategies, and scaffolds to support and enhance student learning.

- The grade 6 materials include a Teacher Resource section for each standard that includes a Unit Teacher Guide, Implementation Strategies, a Scope and Sequence, and a Vertical Alignment document. For example, the Implementation Strategies document under Teacher Resources includes recommendations on instructional and research-based activities for grade 6 and a brief description of each activity's purpose, description, facilitation recommendations, and expected timeline.
- Materials provide a Unit Teacher Guide for teachers to give guidance on each part of the lesson and includes the standard the lesson is addressing, background information the teacher needs to be aware of, prior knowledge students should have on the concept, common misconceptions students might have about the concept, and essential questions the teachers should pose to students at some point during the lesson along with answers and explanations to those questions.

- Materials provide a Teacher Version of each activity that supplies questioning prompts for the teacher, directions on what to say and do with the material, and provides the teacher with more information if needed.

Materials include standards correlations, including cross-content standards, that explain the standards within the context of the grade level.

- The grade 6 materials include science standards correlations in the Unit Teacher Guide for each standard, including the TEKS, background information, prerequisite knowledge, common misconceptions, and essential questions, but do not explicitly refer to the cross-content TEKS. For example, in the Implementation Strategies pdf, grade 6 materials include Readers as cross-content activities for ELA. Materials enhanced readers include the ELAR TEKS addressed within the reader. Materials include standards correlations, including cross-content standards, that explain the standards within the context of the grade level. The materials do not provide any cross-content correlation for math or social studies.
- The materials provide activities called Readers that are correlated to each standard and listed under specific standards on their website. These readers also address Reading and Language Arts (RLA) standards, making them cross-content activities. Materials readers include the ELAR TEKS addressed within the reader.

Materials include a comprehensive list of all equipment and supplies needed to support instructional activities.

- For each grade 6 standard, the materials include a Grade-Level Material List that indicates all items needed for the multiple activities within each unit or throughout the year.
- Within the hands-on activities section of the unit, there is a supply list for the grade level that includes both the consumable and non-consumable items needed for that grade level. Additional materials are listed in the Student Investigation labs.

Materials include guidance for safety practices, including the grade-appropriate use of safety equipment during investigations.

- In the Scope and Sequence document, the grade 6 materials provide a list of SEPs that can be used during investigations. The Teacher Version provides safety materials and procedures for hands-on activities or lab investigations.
- For example, in a grade 6 lesson under standard 6.6B, Pure Substances and Mixtures, there is a hands-on activity called Investigating Mixtures. Within the teacher version, a safety section includes guidance for safety practices and the grade-appropriate use of safety equipment during the investigation.
- Materials include guidance for safety practices, including grade-appropriate use of safety equipment during investigations. Student lab sheets include the following instructions for safety, “Safety should be a top priority in any science activity. If you have questions regarding safety precautions, please ask your teacher for clarification. If there are accidents, notify your teacher right away,” along with activity-specific guidance, such as wearing safety goggles, when needed.

EduSmart Science Grade 6

Indicator 8.3

Materials provide implementation guidance to meet variability in program design and scheduling.

1	Materials support scheduling considerations and include guidance and recommendations on required time for lessons and activities.	M
2	Materials guide strategic implementation without disrupting the sequence of content that must be taught in a specific order following a developmental progression.	M
3	Materials designated for the course are flexible and can be completed in one school year.	M

Meets | Score 2/2

The materials meet the criteria for this indicator. Materials provide implementation guidance to meet variability in program design and scheduling.

Materials support scheduling considerations and include guidance and recommendations on required time for lessons and activities. Materials guide strategic implementation without disrupting the sequence of content that must be taught in a specific order following a developmental progression. Materials designated for the course are flexible and can be completed in one school year.

Evidence includes but is not limited to:

Materials support scheduling considerations and include guidance and recommendations on required time for lessons and activities.

- The grade 6 Implementation Strategies PDF file lists the expected time for each of the following sections: Anchoring Phenomenon and Instruction Modules. In another example, the anchoring phenomena for Unit 6.6(A), States of Matter, Teacher Resources, takes 2–5 minutes, and the Implementation Module takes 20–30 minutes. Every activity has the expected times it takes to complete the activity as cited in the provided rubric. For grade 6, an expected time per component guideline will also be provided to support scheduling considerations of components and activities. For example, the time per component for grades 6–8 bands will reflect the amount of time each component should take. Specifically, The Teacher Resource Guide suggests: Instruction Module: 20–30 minutes, Instruction Module Companion: 30 minutes, Student Review: 10–15 minutes, Quiz: 15–20 minutes, Activities: 15–60 minutes (vary based on type of activity), Interactivities: 10–15 minutes, Simulations: 15–20 minutes Word Explorer: 10–30 minutes depending on number of vocabulary words(approximately 2 minutes per word), Journal Prompt: 5–10 minutes, and Readers: 15–20 minutes.
- The EduSmart Materials provide a Scope and Sequence document that guides teachers on the suggested number of days for each unit, as well as essential questions to ask students; the TEKS correlated with the unit and suggested activities. For example, in the grade 6 Scope and Sequence, the Unit titled States of Matter is suggested to take 7–8 days and lists possible activities such as Anchoring Phenomenon, Instructional Modules, and an Engineering Design Challenge.

EduSmart Science Grade 6

Materials guide strategic implementation without disrupting the sequence of content that must be taught in a specific order following a developmental progression.

- The provided Scope and Sequence support scheduling considerations for the time allotment for each unit of study. The Scope and Sequence guides educators with suggested timelines by reporting category, instructional unit, and standard. Additionally, the Scope and Sequence are planned out to ensure content is taught in a specific order following a developmental progression.
- Materials give implementation strategies to show what order to follow in the development of the lesson through the 5E lesson model structure. The progression of the activities and content within the implementation strategies document reflects a progression from direct instruction, guided learning, collaborative learning, independent mastery, and then station activities for enrichment or intervention. The sequence of the suggested content allows for appropriate developmental progression through the TEKS and content that is required to be taught within one school year.
- EduSmart provides materials based on the standards and purposefully groups modules together that have similar recurring themes and concepts, making it easier for students to connect scientific knowledge. For example, in grade 6, under Force, Motion, and Energy, materials are grouped together for 6.7(A) and 6.7(B). The Scope and Sequence list the TEKS in a suggested order to cover units and topics with the pacing number of days suggested next to each unit.

Materials designated for the course are flexible and can be completed in one school year.

- The Grade 6 materials include sufficient lessons and activities to support a full academic year of learning along with review, reteaching, and spiraling activities for mastery and retention. According to the Implementation Strategies document, grade 6 station activities and student reviews are designed to include condensed versions of the instruction module. Materials group certain TEKS together in one unit. This will ensure that all TEKS are taught in the course of a year. This is evident in the Scope and Sequence where TEKS 6.12(A) and 6.12(B) are combined into one unit.
- The EduSmart materials connect SEPs and the recurring themes in multiple content TEKS to ensure that they are covered multiple times throughout the year. This is evident in the Scope and Sequence since each unit has a recurring theme and/or a scientific and engineering practice associated with it.
- The materials include sufficient lessons and activities to support a full academic year of learning. For example, the minimum suggested time found on the grade 6 level Scope and Sequence is 176 days of instruction. The materials allow for adjusting to local time and scheduling constraints. The Teacher Implementation Strategies document provides recommendations for using the materials, such as learning stations, which may allow for additional time in the classroom for reinforcement and enrichment as needed. In the grade 6 Scope and Sequence, the Unit titled States of Matter is suggested to take 7–8 Days and lists possible activities such as Anchoring Phenomenon, Instructional Modules, and an Engineering Design Challenge. This allows teachers to see a time frame for the unit but still have the flexibility for the amount of time spent on the unit as well as the activities they can use for the unit.

EduSmart Science Grade 6

Indicator 9.1

The visual design of materials is clear and easy to understand.

1	Materials include an appropriate amount of white space and a design that supports and does not distract from student learning.	Yes
2	Materials embed age-appropriate pictures and graphics that support student learning and engagement without being visually distracting.	Yes
3	Materials include digital components that are free of technical errors.	Yes

Not Scored

The visual design of materials is mostly clear and easy to understand.

Materials include an appropriate amount of white space and a design that supports and does not distract from student learning. Materials embed age-appropriate pictures and graphics that support student learning and engagement without being visually distracting. Materials include digital components that are free of technical errors.

Evidence includes but is not limited to:

Materials include an appropriate amount of white space and a design that supports and does not distract from student learning.

- The layout of the materials includes an appropriate amount of white space and colorful images/graphics that help students focus on what is essential, and allow the user to easily follow along. The colors and fonts used ensure the content is easy to read and follow.
- For example, the journal for 6.12C levels of organization includes plenty of white space available for the students to answer the questions. In 6.13C Variations and Changes, students have ample white space to answer the analysis questions that follow the student activity as well as to record their answers in the table provided.
- The materials include an appropriate amount of white space, and the overall design does not distract from student learning. For example, 6.10C Modeling the Rock Cycle Descriptive Investigation includes a student worksheet that includes a clear, prominent title with appropriate subheadings; an image to model how the paper plate should be labeled; data table for recording; and space for students to record their observations throughout and at the end of the investigation. The digital platform color palette is used consistently throughout the entire middle level with bolder colors (orange) to draw attention to links for navigation.
- The quizzes are formatted with ample white space and appropriately sized images, making it possible to answer the questions within the materials. Additionally, readers have enough space and pictures for reference that make the text visually easy for students to read.

EduSmart Science Grade 6

Materials embed age-appropriate pictures and graphics that support student learning and engagement without being visually distracting.

- Materials include graphics and other images that are grade-level appropriate and serve a clear purpose to support the content being taught. The Instructional Modules (IM) used in the platform provide short video-style lessons with age-appropriate graphics and scenarios. The built-in pause portions of the IM allow students and teachers time to absorb the information and replay if needed to ensure understanding of the content being discussed.
- Materials use age-appropriate pictures and graphics to support student learning. An example is included in the anchoring phenomenon picture for 6.12C, and the use of Duck Duck Goose to introduce students to the hierarchical levels of organization within an ecosystem
- The materials include age-appropriate pictures and graphics that support student learning and engagement. For example, each Word Explorer activity includes a section where students choose all correct images related to the vocabulary word. In 6.8A Potential and Kinetic Energy Word Explorer, students click on one of the five vocabulary words and select images they believe match the word's meaning. For “kinetic energy,” students will click on the images of a girl riding a bike, a car on the road, and a person snowboarding. All of these images emphasize objects in motion. An additional example in 6.8A Design the Ride, students use an online simulation to change the height of hills for a roller coaster and observe the effect the change has on the motion of the roller coaster car. The pictures and graphics are simplified to be focused on the content and not distract from the learning.
- Materials embed age-appropriate pictures and graphics that support student learning and engagement. Their readers have pictures for reference that assist student comprehension and give examples for students to that provide context while they are reading. Materials embed age-appropriate pictures and graphics that support learning and engagement with their Instruction Modules. Modules provide concrete examples through graphics and videos that engage students and provide context to the science they are learning.

Materials include digital components that are free of technical errors.

- Materials are free of errors.
- Materials are free of technical errors.
- Materials are free of spelling, grammar, and punctuation errors.

EduSmart Science Grade 6

Indicator 9.2

Materials are intentionally designed to engage and support student learning with the integration of digital technology.

1	Materials integrate digital technology and tools that support student learning and engagement.	Yes
2	Materials integrate digital technology in ways that support student engagement with the science and engineering practices, recurring themes and concepts, and grade-level content.	Yes
3	Materials integrate digital technology that provides opportunities for teachers and/or students to collaborate.	Yes
4	Materials integrate digital technology that is compatible with a variety of learning management systems.	Yes

Not Scored

Materials are intentionally designed to engage and support student learning with the integration of digital technology.

Materials integrate digital technology and tools that support student learning and engagement. Materials integrate digital technology in ways that support student engagement with the science and engineering practices, recurring themes and concepts, and grade-level content. Materials integrate digital technology that provides opportunities for teachers and/or students to collaborate. Materials integrate digital technology that is compatible with a variety of learning management systems.

Evidence includes but is not limited to:

Materials integrate digital technology and tools that support student learning and engagement.

- Materials provide instructional modules, interactivities, and other digital technology that align with the learning objectives as outlined in the TEKS. The materials allow digital technology and tools to be used in whole group settings by being projected on the screen or on individual devices to allow students to work at their own pace.
- Materials include Instructional Modules, Interactivities, and other digital technology components that are purposefully designed and align with the learning objectives as outlined in the TEKS. EduSmart's digital platform is easy to use, navigate, and engage In a way that does not distract from the learning objective that students must show mastery.
- Materials include Instructional Modules, Interactivities, and other digital technology components that are purposefully designed and align with the learning objectives as outlined in the TEKS.
- EduSmart's digital platform allows for easy navigation, which supports students in a way that does not distract from the learning objective and supports students who must show mastery.For example, the digital curriculum includes technology and tools to enhance student learning through features, such as gamified activities, virtual simulations, and engaging reading selections. For example, digital technology and tools can be used in whole group settings by being projected on the screen or on individual devices to allow students to work at their own pace.

- The Implementation Strategies document makes suggestions for whole group, small group, or individual work for each of the digital learning tools available in the materials. For example, they have a variety of interactive materials, including their reviews, interactivities, and simulations, that are engaging and support student learning. Materials provide integrated digital technology and tools that support student learning and engagement. For example, digital versions of articles that contain novel content applied to science concepts that students can read and interact with questions on their computers. Students have options when reading to change the font size, contrast, and zoom in to make the reader easier to understand, see, and read.

Materials integrate digital technology in ways that support student engagement with the science and engineering practices, recurring themes and concepts, and grade-level content.

- The materials provide activities and other digital technology that allow students to collect, manipulate, and analyze data as outlined in the science and engineering practices TEKS. For example, materials include digital technology materials to help students better understand and apply the material they are learning. Students can collect, manipulate, and analyze data as outlined in the science and engineering practices TEKS. EduSmart carefully designs digital technology to be purposeful, relevant, and aligned with learning objectives as outlined in the TEKS. The use of digital technology allows students to make connections to recurring themes and concepts through real-world applications.
- Materials integrate digital technology in ways that support student engagement with the science and engineering practices and grade-level content. The materials provide opportunities for students to engage in online simulations and virtual lab experiments to practice the science and engineering practices of conducting investigations, collecting and organizing data, and communicating their findings like scientists. Materials also integrate digital technology in ways that support student engagement with recurring themes and concepts. According to the EduSmart Implementation Strategies document, students are exposed to the recurring themes and concepts, along with grade-level content, in the science investigation activities, instruction module companions, readers, and anchoring phenomenon. Suggested recurring themes and concepts for each unit are included in the grade-level scope and sequence.
- Materials include specific science and engineering and recurring themes and concepts sections on their website that provide online investigation activities, hands-on activities, and instructional modules that are engaging and address these standards. Within grade-level content, they have the same activities that create the same engagement and digital technology integration.
- The Implementation Strategies Guide states: “EduSmart offers instructional materials specifically tailored to science and engineering practices. These activities are found in the title titled ‘Scientific and Engineering Practices.’ To assist teachers with the integration of the SEPS into the context of the content being taught, suggested SEPS are listed on the scope and sequence for each content standard.” The guide also suggests, “Instructional modules can be used to introduce scientific and engineering practices or to refer to skills.”
- The Interactives are gamified activities that are used to review SEPs and RTCs. The activities are hands-on activities designed to facilitate student’s knowledge and experiences with the science and engineering practices.”

EduSmart Science Grade 6

Materials integrate digital technology that provides opportunities for teachers and/or students to collaborate.

- EduSmart's digital content can be linked to various Learning Management Systems, which allows for easy collaboration between students to teachers and students to students. For example, students receive feedback on their assessment from the Learning Management System.
- EduSmart allows teachers to share live lessons with other teachers through the EduSmart platform workspace. EduSmart allows teachers to create live lessons and share them with students.
- EduSmart allows teachers to assign students to sub-groups to allow for more individualized instruction, and students can work collaboratively in those groups by downloading the content into other learning management systems, like Google Drive.

Materials integrate digital technology that is compatible with a variety of learning management systems.

- EduSmart's digital technology is compatible with a variety of learning management systems and technology devices. Digital technology is accessible on computers, laptops, and tablets. The digital technology is available to be shared through a variety of platforms, including both the EduSmart platform and Google Classroom.
- Materials integrate digital technology that is compatible with a variety of learning management systems. EduSmart allows “one-click” assigning of activities to Google Classroom, the EduSmart LMS, or the ability to copy URLs to paste into another LMS.
- For example, teachers can assign assignments and activities to Google Classroom through the learning management system itself, or there are links to activities that can be copy pasted. EduSmart does note when copy-pasting the assignment URL: “Your students can access the assignment via this URL. To access this URL, students will need to be logged in to EduSmart or be prepared to enter valid login credentials.”

EduSmart Science Grade 6

Indicator 9.3

Digital technology and online components are developmentally and grade-level appropriate and provide support for learning.

1	Digital technology and online components are developmentally appropriate for the grade level and align with the scope and approach to science knowledge and skills progression.	Yes
2	Materials provide teacher guidance for the use of embedded technology to support and enhance student learning.	Yes
3	Materials are available to parents and caregivers to support student engagement with digital technology and online components.	Yes

Not Scored

The materials contain digital technology and online components that are developmentally and grade-level appropriate and provide support for learning.

Digital technology and online components are developmentally appropriate for the grade level and align with the scope and approach to science knowledge and skills progression. Materials provide teacher guidance for the use of embedded technology to support and enhance student learning. Materials are available to parents and caregivers to support student engagement with digital technology and online components.

Evidence includes but is not limited to:

Digital technology and online components are developmentally appropriate for the grade level and align with the scope and approach to science knowledge and skills progression.

- EduSmart designs digital technology and online components to align with the scope and approach to science knowledge and skills progression as outlined in the TEKS. Simulations and interactives provide students an opportunity to build their scientific inquiry skills through well-defined skill progression. EduSmart's digital technology and online components also support grade-level learning objectives of the materials as outlined in the TEKS and are grade-level appropriate. For example, simulations and interactives provide students the opportunity to build their scientific inquiry skills through well-defined skill progression. Interactivities and Simulations provide some level of guidance to help students gather relevant information, but also enough freedom for students to explore some of their ideas. These activities provide students opportunities to conduct virtual experiments, gather and collect data, and communicate their findings like a real scientist.

Materials provide teacher guidance for the use of embedded technology to support and enhance student learning.

- The materials provide an Implementation Strategies document that guides teachers on the use of embedded technology to support and enhance student learning. This information can guide the teacher on how EduSmart components can be used in their instruction. The Implementation Strategies document identifies where some of the activities can be completed digitally or on

paper. For example, portfolios can be either electronic or paper to keep track of student work, especially as they work through engineering design challenges. For example, the materials indicate that the Instructional Module Companions "... can be used for digital or printed interactive journal components."

- Materials include an Implementation Strategies Guide for teachers to use for guidance for the use of embedded technology to support and enhance student learning. For example, the guide states that the instructional modules: "Can be used whole group or assigned virtually for small groups or individuals." and "When assigned virtually, the student must interact with the video after each break to continue the video to reduce student inattention."
- Additionally, materials provide an Implementation Strategies Guide for teachers to use for guidance for the use of embedded technology to support and enhance student learning. For example, the guide states that the science investigation activities "... are virtual lab simulations that incorporate recurring themes and concepts with science and engineering practices such as asking questions, analyzing and interpreting data, and designing solutions." It also says, "Data can be collected and analyzed in traditional lab format or Claim, Evidence, Reasoning format." Furthermore, Materials provide an Implementation Strategies Guide for teachers that provides guidance for using embedded technology to support and enhance student learning. For example, the guide states that for quizzes, "Teachers have the autonomy to determine the use of the quizzes and the mode they are assigned. The quizzes can be printed, shown in present mode, or assigned online."

Materials are available to parents and caregivers to support student engagement with digital technology and online components.

- Materials include a caregiver letter available to parents and caregivers to support student engagement with their digital platform and online components. The communication letter gives guidance on how to support parents and caregivers with student engagement with EduSmart's digital platform and online components. It introduces guardians to the digital curriculum, and it can be used to support learning from home. The Teacher Communication Guide suggests ways for teachers to help provide support to parents and caregivers to support student engagement with digital technology and online components.
- EduSmart's learning platform is accessible regardless of physical location to allow students to access materials at home. Parents and caregivers have the opportunity to access the content with their child to support student engagement. Materials are available to parents and caregivers to support student engagement by using the learning platform to track their progress and provide support when needed on identified concepts.