Summit K12 Dynamic Science Grade 6

Summit K12 Dynamic 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 a variety of TEKS-aligned and developmentally appropriate assessment tools.
- The materials include some guidance that explains how to analyze and respond to data from assessment tools.

- The assessments are somewhat 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 some 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 some 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 somewhat 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 the 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 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.	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.

- 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. For example, the materials include a presentation on "Ask Questions and Define Problems." There are skills companions and vocabulary practice available for every SEP, including, but not limited to, conducting investigation and designing solutions, developing and using models, and investigating STEAM careers.
- The materials provide multiple opportunities to develop grade-level appropriate scientific and engineering practices, as the TEKS outlines. For example, materials prompt students to engage in hands-on activities that provide students with opportunities to practice and demonstrate scientific and engineering practices. In a 6.6D Density lesson, students compare and contrast

substances with similar volumes but different densities and apply the concept of relative density to explain a phenomenon. The SEPs involved in this investigation are 6.1E: Collect quantitative data using the International System of Units (SI) and qualitative data as evidence and 6.3A: Develop explanations and propose solutions supported by data and models consistent with scientific ideas, principles, and theories.

- For example, materials include opportunities for students to design and conduct grade-appropriate experiments, collect and analyze data, and develop and test hypotheses. In a 6.10C lesson on Metamorphic, Igneous, and Sedimentary Rocks, students complete a three-step investigation of the rock cycle by using and manipulating chocolate into various states. The SEPs applied in this investigation are 6.1A: Ask questions based on information from text, 6.3A: Develop explanations and propose solutions supported by data and models and consistent with scientific ideas, principles, and theories, and 6.3B: Communicate explanations individually and collaboratively in a variety of settings and formats.
- The Lesson Guide for 6.7B, Balanced and Unbalanced Net Forces, indicates that 6.2 C utilizes references. There are two different activities, Calculating Net Forces and Balanced or Unbalanced Investigation, where the direct materials guide students to use mathematical calculations to assess quantitative relationships.

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

- Materials provide multiple opportunities to connect between and within overarching concepts using recurring themes. Materials explain how students engage in Scientific Conversation. For example, materials provide teachers an at-a-glance view of the recurring themes on the 6th Grade TEKS-SEPs-RTCs Crosswalk on the Dynamic Science Teacher's Guide page. Teachers can see the placements of RTC 6.5A-G and their corresponding lessons. For example, in lesson 6.6B, Pure Substances, Solutions, and Mixtures, students investigate the physical properties of matter to distinguish between pure substances, homogeneous mixtures (solutions), and heterogeneous mixtures. Each lesson provides multiple opportunities to make connections using the same RTC. For example, the Lesson Guide for 6.6B, Pure Substances, Solutions, and Mixtures, 6.5D utilization is taking place. At the beginning of the lesson, students observe various mixtures to identify patterns, discuss their findings, and develop a way to group the combinations. The RTCs linked to this activity are 6.5 DG. There are three activities where students will examine and model the parts of a system and their interdependence in the function of the system: What Do We Have Here, Gallery Walk and Group Discussion, and What's In It.

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

- Materials strategically and systematically develop students' content knowledge and skills as appropriate for the concept and grade level outlined in the TEKS. Each Lesson Guide begins with an Engage and Establish Relevance section introducing the topic. Next, teachers use the Teach and Discuss team to introduce fundamental concepts and help students build understanding through hands-on experiences, literacy activities, discussions, and other instructional tools. Finally, teachers use the Apply and Extend activities to allow students to synthesize and extend their understanding of the concepts. The 6.6B Pure Substances, Solutions, and Mixtures Lesson Guide provides one example of the intentional sequencing of materials. Lesson design purposes allow the teacher to scaffold concepts with increased complexity as the lesson components

unfold. For example, in lesson 6.10B, Layers of Earth, student engagement begins with student pairs brainstorming and listing as many things as they can think of that have layers. Students then consider how layers are differentiated. Next, students predict and draw what they will see as they dig to the center of Earth. The next phase of the lesson includes teaching the key concepts, including Earth has three layers: the crust, the mantle, and the core, and connecting them to the engagement activities. Students will then use everyday examples, such as apples and hard-boiled eggs, to model the Earth's layers. In the application and extension portion of the lesson, students use one of the examples discussed during the engagement activity to create a poster comparing the layers of the object to the layers of the Earth. Students then create a model of Earth's layers, labeling each layer and describing each layer.

- The materials support teachers in developing student content concepts and skills by giving them resources and cues at varying points in lessons and units throughout the grade level. For example, in the lesson notes for 6.6C, Identify Metals, Nonmetals, Metalloids, and Rare Earth Elements, teachers prompt students to find the zig-zag line on the right side of the table. This line makes it easier to identify the elements. Metalloids' locations are along the zig-zag line. Students notice that the elements to the right are nonmetals, and the elements to the left of the metalloids are metals, except for hydrogen. Hydrogen is an element that shares similar properties with some metals but categorizes as a nonmetal. You will also find other metals at the bottom of the periodic table. Key concepts are bolded with additional information to assist teachers in ensuring critical information is taught in the lesson.
- The materials allow for developing students' knowledge and skills by providing lessons on previously taught concepts that connect to current grade-level TEKS. For example, before introducing the 6th-grade TEKS 6.9A on Seasons, teachers are encouraged to review the idea of Earth's rotation from 5th-grade TEKS 5.9A.

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.

- Summit K12 design lessons with engaging activities that allow students to ask questions and plan and conduct investigations. These investigations, whether using physical classroom tools or digital simulations, are included throughout the course. Materials include sufficient opportunities, as outlined in the TEKS, for students to ask questions, plan and conduct classroom investigations, and engage in problem-solving to make connections across disciplines and develop an understanding of science concepts. Materials provide the teacher with a set of possible student questions, including guiding questions the teacher can ask to help students connect prior learning and retain new information. For example, in lesson 6.6E, Evidence of a Chemical Change, the teacher begins by asking students if they can think of any examples of chemical changes they may have observed in their daily lives. After making paper airplanes, materials suggest teachers ask students, “What changes occurred when we turned the flat paper into a paper airplane? Did the makeup of the paper change?” Other questions in the Lesson Guide include guiding questions after a demonstration lab, Elephant toothpaste, asking whether a chemical reaction has occurred, and what evidence they can observe.
- Materials give students opportunities to plan and conduct classroom and field investigations. Students use scientific practices to plan and conduct simple descriptive investigations. For example, in lesson 6.7B, Balanced and Unbalanced Net Forces, students conduct an outside quest with a rope to play tug-of-war. For the first game, the class will split into two teams. Students discuss why one side won. For the next match, five small students are on one side and

one big student on the other. Students observe and discuss if forces are equal or unequal—next, two students are on one side and the teacher on the other. Students test different combinations, examining the details after each game. Students discuss how forces can be equal or unequal (as learned in 5th grade) and relate to the new vocabulary of balanced or unbalanced.

- Materials include sufficient opportunities, as the TEKS outlines, to engage in problem-solving to make connections across disciplines. Lesson Guide 6.9B Ocean Tides consists of an engaging section, "Where Did the Water Go?", where the materials guide the teacher to show the students the phenomenon of a location at high and low tide. Materials suggest ways for the teacher to explain to the students that this is the exact location on the same day. This lesson also includes a reading passage for students to visit the NASA website and learn about tides. There is also an Ocean Tides comic strip where students create a comic strip demonstrating the positions of the Sun, Earth, and Moon and how they affect ocean tides.

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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 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 embed phenomena and problems across lessons to support students in building and developing knowledge through authentic application and performance of scientific and engineering practices and grade-level content as outlined in the TEKS. For example, in lesson 6.6D, Density, students compare and contrast substances with similar volumes but different densities and apply the concept of relative density to explain a phenomenon. For example, in lesson 6.7C of Newton's Third Law of Motion, students set up a balloon rocket system and should discover the effects of blowing up a balloon to larger and larger sizes. As students go from small to medium to large, they analyze that the balloon travels farther and farther; this demonstrates that the reaction is always equal and opposite to the action. For example, in lesson 6.12A, Biotic and Abiotic Factors, students observe and note things that make up the schoolyard, such as grass, insects, air, and trees. Using their notes, partners discuss their observations and determine living and nonliving things. Students create a table or T-chart and sort their observations into those categories. Students create factors to determine whether something is living or nonliving and develop a rule that explains what a living thing is and helps them to determine whether an unknown item is living or nonliving.

- Materials embed phenomena throughout lessons to support students in constructing, building, and developing knowledge. For example, the Lesson Guide for 6.10 C, Metamorphic, Igneous, and Sedimentary Rocks, begins with students looking at an eroded canyon and answering questions on this phenomenon. The lesson then has students investigate a discovery made in Antarctica in 2020. Students then move through a series of investigations on the rock cycle before finally creating a story on the rock cycle. At each stage, the students work with phenomena to connect their learning.
- Materials embed problem-solving through applying science and engineering practices, recurring themes and concepts, and grade-level TEKS. For example, the Lesson Guide for 6.10B, Layers of the Earth, SEP's 6.1G, 6.2A, and 6.3A utilization demonstrates recurring themes and concepts. Additionally, the RTC 6.5D involvement is also occurring. Lesson Guides include phenomena to kick-start a lesson and engage students in asking questions and seeking evidence-based answers through investigations, research, and scientific argumentation. Lesson Guide TEKS 6.6E, Evidence of a Chemical Change, includes examples of embedded phenomena used to engage students in scientific reasoning, precise application and performance of SEPs, Recurring Themes and Concepts, and content TEKS. In Magic Ink, students write secret messages using lemon juice, and other students decode the messages.

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

- The materials provide opportunities to leverage students' prior knowledge and experiences related to phenomena and engineering problems, ensuring teachers can connect to previous science TEKS. For example, materials provide scaffolded lessons in reporting category 1, Matter and Energy. Lesson 6.6B, Pure Substances, Solutions, and Mixtures, is located with two fifth-grade lessons, 5.6B Mixtures Maintain Physical Properties, and 5.6 C, Solutions. Furthermore, in reporting category 3, Earth and Space, lesson 6.9A, Seasons, is located with lesson 5.9A, Earth's Rotation, to help students draw from fifth-grade content and build upon it. The Lesson Guide for 6.7B, Balanced and Unbalanced Net Force, provides teachers with lessons on equal and unequal forces from 5th grade (5.7A) to help activate prior knowledge before beginning the 6th-grade concepts. Students then build on this knowledge by completing a series of activities to help them understand how balanced and unbalanced forces affect the motion of an object. A Teacher Note says to activate prior knowledge by referencing students' understanding of the term "pure" and their understanding of mixtures, substances, and solutions, which they learned in 5th grade. Students understand that some mixtures can be easily separated, some mixtures can't be easily separated, and pure substances cannot be separated.

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

- Materials clearly outline the scientific concepts and goals behind each phenomenon and engineering problem for the teacher. For example, in lesson 6.6C, Identify Metals, Nonmetals, Metalloids, and Rare Earth Elements, in an application and extension activity called Engineering Challenge: Product Development, students use their knowledge of metals, nonmetals, metalloids, and rare earth elements to upgrade an existing product, such as cell phones and solar panels and make it more cost-effective. For example, in lesson 6.9B, Ocean Tides, students observe the phenomenon of a location at high and low tides. Students reflect on this

observation as they discuss how this phenomenon affects humans and how the rise and fall of the ocean is advantageous.

- The Teach and Discuss section of the Lesson Guide for 6.10B, Layers of the Earth, thoroughly describes each science concept the students need to know. It includes labeled diagrams and definitions for vocabulary words. Materials clearly outline the goals behind each phenomenon or engineering problem for the teacher. In the Lesson Guides for every TEKS, there are gray boxes containing the goals for each lab, investigation, or engineering problem, including the plans for that lab. For example, in the Lesson Guide for 6.6A, Compare Solids, Liquids, and Gases, there is a gray box for the Modeling Atoms and Molecules activity. This gray box indicates that the goal is to "distinguish between atoms and molecules." There are guided questions with the images. The critical concept section in the lesson clearly outlines phenomenon details for the teacher to go over with students.
- For example, in lesson 6.13C, Variations within a Population, students observe variations in the sizes and shapes of grapes. Students measure the length or circumference of each grape out of ten and record this data. Then, students determine the mass of the grape by using an electronic scale or triple beam balance. Next, students calculate the average length and mass of the grapes. Finally, they share their data tables with another student pair to compare their range of shapes and masses. Then, they answer Making Connections questions, such as “Describe the similarities observed in the sizes and masses of the grapes you measured. Describe the differences observed in the sizes and masses of the grapes you measured. Describe any patterns observed as you compared measurements to your classmates’ measurements.”

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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 an 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 an 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.

- The materials connect new learning to previous and future knowledge within and across grade levels. For example, in the Teacher's Guide, Reporting Category 1, Matter and Energy, lesson 6.6B, Pure Substances, Solutions, and Mixtures, students investigate the physical properties of matter to distinguish between pure substances, homogeneous mixtures (solutions), and heterogeneous mixtures. The lesson materials state previous learning, "In 5th grade, students compare and contrast matter based on measurable, testable, or observable physical properties 5.6A; demonstrate and explain that some mixtures maintain physical properties of their substances 5.6B; compare the properties of substances before and after they combine into a solution; and demonstrate that matter conserves in solutions 5.6C. In 5th grade, students observe how organisms live and survive in their ecosystems by interacting with living and nonliving components (TEKS 5.9A)."
- The lesson materials also state future learning: "In 7th grade, students will distinguish between physical and chemical changes in matter 7.6C and describe aqueous solutions in terms of solute and solvent, concentration, and dilution 7.6D. In 8th grade, students will explain by modeling how matter is classified as elements, compounds, homogeneous mixtures, or heterogeneous mixtures 8.6A. Additionally, inside the Lesson Guides, in the 'Teach and Discuss' section, are

vertical alignment boxes showing the alignment below and above the current grade. For example, in the Lesson Guide, TEKS 5.6A and 7.6A are explained and connected to TEKS 6.6C."

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

- Materials are intentionally sequenced to scaffold learning, allowing for deeper conceptual understanding. Each Lesson Guide starts with an Engage and Establish Relevance section where students first experience phenomena related to the topic in some way and begin building their knowledge base. Then the lesson progresses to Teach and Discuss, where students learn vocabulary and essential concepts. Labs and investigations also happen during this section. The last section is Apply and Extend, where students create models, design their experiments, research further, and complete engineering challenges. For example, in the Lesson Guide for 6.13A, students start with a series of questions while looking at images of first-generation and modern microscopes in the Engage and Establish Relevance section, move to a reading activity on hypothesis, theory, and law and a card sort in the Teach and Discuss section, and finalize their learning with research on how discoveries in cell theory have contributed to advances in healthcare in the Apply and Extend section.
- Materials are intentionally sequenced to scaffold learning, allowing for deeper conceptual understanding. Before participating in labs or investigations, students gather basic information, including necessary vocabulary. For example, in 6.7A Forces Acting on Objects, students complete a PHET simulation to gain basic knowledge and vocabulary before completing an engineering challenge on chain reaction machines. In sixth grade, students identify elements on the periodic table as metals, nonmetals, metalloids, and rare Earth elements based on their physical properties and importance to modern life. In seventh grade, students use the periodic table to identify the atoms and the number of each kind within a chemical formula. The lesson materials also connect to future learning. In high school chemistry and IPC, students will continue the study of chemical reactions. For example, in lesson 6.9A, students model and illustrate how the tilted Earth revolves around the Sun, causing seasonal changes. The lesson begins with students observing an image of the four positions of Earth around the sun concerning the season. Afterward, students write two questions to ask their partners about the picture. Then, students talk with their partners, taking turns asking questions. Teachers may assign a formative assessment, review video, vocabulary activity, and a second formative assessment within each TEKS lesson. Scaffolds from previous grade levels are included in these learning resources to assist students requiring differentiated support. For example, in Category 4 of Concept Mastery, TEK 6.12A Biotic and Abiotic Factors, the teacher can assign Formative Assessment 1, TEKS Video, Vocabulary, and Formative Assessment 2 to scaffold the learning.

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

- The materials present grade-specific core concepts. Within each lesson, materials broaden the core concepts into several key concepts, bolded for ease of view. For example, in Lesson 6.8B, Energy Transfers & Transformations, there are 13 critical concepts provided with an expanded explanation. Some key concepts are: "Thermal energy, or heat energy, is the energy in moving particles of matter, and forms of energy include mechanical, sound, light, chemical, electrical, and thermal." This section also has a slide deck to use with students, including diagrams of core concepts, vocabulary students need to understand, and activities to help students master the

concepts. This information aligns with the wording of the TEKS. For example, 6.10B Layers of the Earth says, “Students will model and describe the layers of the Earth, including the inner core, outer core, mantle, and crust.” In the Lesson Guide for 6.10B, the Key Concepts section has detailed definitions and diagrams of those specific layers.

- The materials present recurring themes and concepts. For example, the materials include a section in the Teacher’s Guide to assist with understanding recurring themes and concepts (RTC). The slideshow defines each RTC and gives relevant examples of each. The teacher can view which lessons correspond with a specific RTC by viewing the sixth Grade TEKS-SEPs-RTCs Crosswalk in the Teacher’s Guide. For example, RTC 6.5E analyzes and explains how energy flows through systems and how energy conservation happens in Lessons 6.8ABC and 6.11B. The materials present science and engineering practices. For example, the materials include a Scientific and Engineering Practices (SEP) section where teachers can find and gain knowledge on each specific goal. For example, for SEP 6.1G, 6.2A Develop and Use Models, teachers can view a skills companion slideshow that explains “What a is Model, the Types of Models, Advantages of Models, and Limitations of Models,” along with activity suggestions to help students attain these skills. The course's Scientific and Engineering Practices section includes Skills Companions that teachers can use to provide instruction on these process standards. Each presentation design is to support the SEP and RTC TEKS, leading to more fulfilling and in-depth conversations when discussing connections within core concepts instruction. For example, the skills companion for Conduct Investigations and Design Solutions covers SEPs 6.1B and 6.2D.

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

- Mastery requirements of the materials are within the boundaries of the main concepts of the grade level. Each Lesson Guide states the grade level TEKS at the top, which provides the core vocabulary, study guides, TEKS videos, and formative assessments. The Teach and Discuss section gives the vertical alignment below and above, providing teachers with the boundaries of their topics. The materials include specific learning targets for each grade level. For example, the materials provide teachers with a scope and sequence which they can use to see the grade-specific standards of sixth-grade science and ensure the materials include all means. The size and sequence list all TEKS in the order of recommended pacing.
- The materials clearly define the boundaries of content that students must master for the grade level. For example, the materials include a concept mastery section in the Teaching and Learning section of the Teacher’s Guide. The guide states, “The Concept Mastery Approach is a rigorous process teachers follow to help each student master both the concepts and the academic vocabulary. Vertically-aligned scaffolds are built into the Teacher’s Guide and student tables to differentiate and accelerate student learning and mastery. All content is organized by category and TEKS, making it easy to follow any scope and sequence.” Students must attain specific percentage points on assessments and can be assigned scaffolded lessons to fill in any knowledge gaps.

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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 of 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.

- 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. Teachers may reference supports in the Teacher's Guide page's Scope and Sequence/Pacing Guides section. For example, the section explains the design and purpose of the scope and sequence. The materials implement the design with an optional year-long scope and sequence that ensures all TEKS are covered within one school year. Scientific and Engineering Practices (SEP) and Recurring Themes and Concepts (RTC) standards are integrated into lessons and taught within science content standards. The materials include guiding documents that explain how content and concepts increase in depth and complexity across lessons and units within the grade level. A phenomenon sense-making guide is included for each TEK to help students gain an understanding of different phenomena. The materials implement designs as stand-alone units. The Pacing Materials state that the pacing guide "serves as an optional resource that teachers and administrators may use in addition to or in support of any district-provided pacing guidelines."
- Each lesson within the materials contains a vertical alignment table and connections to recurring themes and concepts and scientific and engineering practices. For example, in Lesson 6.7A,

Forces Acting on Objects, teachers can see the related knowledge from fifth grade; students explored how equal and unequal forces acting on an object cause motion patterns (TEKS 5.7A) and experimented with the effects of forces on objects in a system (TEKS 5.7B). Teachers can also preview the next level of knowledge gained in future grade levels; in seventh grade, students will explore Newton's first law of motion (7.7D). Each component of the lesson lists the coding for SEPs and RTCs. However, the full wording of each standard is at the end of the lesson. In this lesson, the related SEPs include: 6.1A Ask questions and define problems based on observations or information from text, phenomena, models, or investigations; 6.1D Use appropriate tools such as metric rulers, timing devices, magnets, and lab notebooks or journals, and 6.1F Construct appropriate tables, graphs, maps, and charts using repeated trials and means to organize data. The RTC in this lesson is 6.5B: Identify and investigate cause-and-effect relationships to explain scientific phenomena or analyze problems.

- Materials provide a vertical alignment to support teachers. In the Teach and Discuss section of each learning guide is a pair of boxes showing the vertical alignment to TEKS below and above the current grade level. For example, in the Lesson Guide for Lesson 6.10C, Metamorphic, Igneous, and Sedimentary Rocks, the vertical alignment shows two TEKS for fifth grade, 5.7A and C, are aligned with 6.10C as well as two for seventh grade, 7.10A and B.

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 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. For example, in Lesson 6.7B, Balanced and Unbalanced Net Forces, teachers can view bolded science concepts with expanded explanations, such as "Net force is the sum of all forces acting on an object. Forces can operate in either horizontal or vertical directions. Horizontal forces move from side to side, while vertical forces move up and down." Each Lesson Guide contains a section called Teach and Discuss. This section gives explanations and examples of the science concepts taught in that unit. For example, the Lesson Guide for Lesson 6.6A, Compare Solids, Liquids, and Gases, has the Teach and Discuss section. It explains key concepts, such as the unique physical properties of solids, liquids, and gasses, and includes a card sort with an answer key where students compare the states of matter.
- Materials contain misconceptions of science concepts to support the teacher's subject knowledge and recognition of barriers to student conceptual development as outlined in the TEKS. Teachers can see misconceptions such as the "sum of all forces" definition of a net force, which may lead students to always add forces together to calculate net force, even when forces act in opposite directions. For example, in Lesson 6.8B, Energy Transfers & Transformations, teachers can view bolded science concepts with expanded explanations, such as "Collisions of matter or objects transferring energy from one object to another. When a ball is kicked, energy from the foot moves into the ball, resulting in the ball's motion. When a car collides with another, energy is transferred from one car to the other, crushing both vehicles." Teachers can also see misconceptions, such as students thinking energy is lost when it turns into a different kind of energy because it changes names or is hard to measure. Many energy transfers result in releasing thermal energy, so students may think energy is lost when it only transforms into a new type of energy. For example, in Lesson 6.12A, Biotic and Abiotic Factors, teachers can view bolded science concepts with expanded explanations, such as abiotic factors are the nonliving

parts of an ecosystem. Abiotic factors include water, sunlight, soil, rocks, temperature, and air. Teachers can also see misconceptions, such as most students understanding that animals compete for food and mates, but many do not know that plants do the same thing. Plants in the rainforest compete for sunlight.

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

- Materials explain the intent and purpose of the instructional design of the program. Located within the Teacher's Guide section are resources to learn more about the intentional design of the materials. For example, in the Course, Design section is the program philosophy. Teachers may reference or view the program's tenets in a Claim, Evidence, and Reasoning (CER) framework. For example, students may make sure that scientific inquiry is the essence of learning science. The evidence and reasoning for this are that students learn science by observing phenomena, asking questions, conducting investigations, and using scientific practices to answer those questions. The best way to learn science is to do science.
- Materials explain the intent behind the instructional design of the program. The teacher's guide includes a section on why they chose to use the 5E model lesson plan. The section Using the 5E Instructional Model with the Dynamic Science Courses says, "Our instructional model incorporates all of the elements of 5E and more. Our curriculum is flexible, interactive, and hands-on. It implements productive designs for students to struggle and succeed in multiple learning pathways. We believe in building a community of learners through engaging activities that appeal to various learning modalities and diverse learners." Teachers can choose from various suggested activities for students to explore new concepts through concrete learning experiences, individually and collaboratively. These experiences include hands-on investigations, problem-solving, virtual labs, reading, writing, and acting as scientists and engineers. Students engage in critical thinking and scientific decision-making. Students use writing and structured peer interactions to explain their thinking and conceptual understanding. They build knowledge systematically and coherently. The teacher adds layering to the learning with content videos, new terms, and practice. Students elaborate on and extend their learning by applying it to a new situation or problem. Teachers can choose various activities to enhance students' more profound understanding of the concept and reinforce new skills.

Summit K12 Dynamic Science Grade 6

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. 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.

- Materials support students' meaningful sensemaking through reading, writing, thinking, and acting as scientists and engineers. For example, in lesson 6.6B, Pure Substances, Solutions, and Mixtures, students investigate the physical properties of matter to distinguish between pure substances, solutions, and heterogeneous mixtures. At the beginning of the lesson, students have a plastic bag filled with snack mix in the engagement piece. Students describe the bag's contents and answer, "What do you think? Are the contents in the bag pure substance? A mixture? something else?" Students separate the snack mix into individual types of snacks/components and describe each element. Then, students engage in a think-pair-share to collaboratively compare the components, using their descriptions of each snack to support their discussion and to consider whether the properties of each substance/snack item change when mixed in the bag. Students record their findings on a provided form with the investigation.

- Page 2 of the Summit K12 Philosophy document says, "Scientific Inquiry is the Essence or Learning Science," and states that students learn science "by observing phenomena, asking questions, conducting investigations, and using scientific practices to answer those questions." The materials provide consistent learning opportunities that support meaningful sensemaking through reading, writing, thinking, and acting as scientists and engineers. Page 2 of the Summit K12 Philosophy document states that the course includes "600+ opportunities for students to investigate, explore, and experience science as scientists and engineers."
- There is a science and engineering practices section that goes through each SEPs. The skills companion explains the process in a PowerPoint with suggested activities and questions. There is also a vocabulary check over each skills companion that allows students to apply the skill. For example, in the Lesson Guide for 6.11A, Impact of Resource Management on Global Issues, students can read, write and think like a scientist. In A Case Study: Namibia Wildlife Conservancies, students read the case study. After students read and annotate the text, they draw two pictures. The first picture will illustrate the natural environment before the conservancies. The second picture will illustrate the natural environment after the establishment of conservancies. Next, students write a short paragraph explaining how the natural environment improvement significantly reduced poverty in the local community. Finally, students research other examples of how an increased connection to natural resources has alleviated poverty.

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.

- Materials provide multiple opportunities for students to engage with grade-level appropriate scientific texts to gather evidence and develop an understanding of concepts. For 6th grade, there are 21 leveled Non-literary/Non-fiction texts. Science reporting category and science TEKS organize the texts. Also available are teacher notes to guide student reading. At the end of each e-book, students apply SEPs process skills, such as reasoning why dogs can hear sounds that people cannot. For example, following the Science Literacy section of the main course page, students are provided with various e-books related to the multiple concepts studied in the reporting categories. For example, reporting category two, Force, Motion, and Energy, contains an e-book titled “Energy on the Move.” The book's first page shows students how they can be strategic learners by listing key vocabulary terms and reminding the reader to connect what they read and real life. The book explains the concept and contains several text features such as subtitles, bolded words, captions, graphics, and call-out boxes.
- The materials provide multiple opportunities for students to engage with grade-level appropriate scientific texts. According to the Philosophy document, the course includes "Differentiated science literacy modules with over 200 e-books including relevant second language acquisition scaffolds and supports covering the Science TEKS, SEPs, ELPS, and RLA TEKS." The materials provide multiple opportunities to engage with scientific texts, including pre-reading and vocabulary, to help them develop an understanding of concepts. In the 6th-grade Differentiated Literacy section, 21 e-books cover 6th-grade TEKS and a few 5th-grade TEKS. Inside the e-books are a list of science vocabulary words, before, during, and after reading questions, reading strategies, fully labeled diagrams, and then the vocabulary words defined as they present within the text. For example, in the e-book Rocks and the Rock Cycle, 6.10C, the vocabulary words *minerals, properties, igneous rock, magma, crystals, sedimentary rock, metamorphic rock, weathering, erosion,* and *rock cycle* are listed at the beginning and then

defined on pages 1-5. Each topic includes four texts. Each text provides vocabulary boosters and a content test. For example, in 6th-grade properties of matter, readers have Describing and Measuring Matter; Atoms, Elements and Compounds, Physical and Chemical Changes, and Chemical Reactions.

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.

- 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. For example, in lesson 6.6E, Evidence of Chemical Change, students are shown key concept slides with explanations, illustrations, and images, such as the various modes of light production as evidence of chemical change. The photos include a marshmallow burning, fireworks, an explosion, and glow sticks. The slides have a teacher guide with student questions for concept engagement. For example, in reporting category four, organisms and environments, students participate in the lesson by engaging with the interactive e-posters. Each lesson in the unit has a corresponding poster that contains key concepts that can be interacted with features such as highlighting, a draw/write tool, and sticky notes. One of the interactive e-posters for lesson 6.12A Biotic and Abiotic Factors contains information on the interactions between living and non-living components of an ecosystem. Images include various species at a waterhole and how different species obtain food in their environment.
- Materials provide students with opportunities to engage in graphic modes or communication. For example, after reading the e-book on Rocks and the Rock Cycle, students are asked on page 6 to communicate their knowledge of the three types of rocks form by completing a chart with columns for "How it Forms" and an example of each type of rock. For example, in the lesson Balanced and Unbalance Net Forces (6.7B), students have multiple opportunities to respond in written and graphic modes. In the Balanced or Unbalanced Investigation, students complete an inquiry-based investigation using a string and washers to model balanced and unbalanced forces. Students must collect data and then write a response using data from the experiment to answer the guiding questions. In the Real-Life Diagram Analysis group project, students create, analyze, and diagram examples of balanced and unbalanced forces by drawing force arrows, calculating net force, and describing the object's motion.

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.

- 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. For example, in lesson 6.9B, Ocean Tides, students view the phenomenon of a location at high and low tide. Students know that this is the exact location on the same day. Students make sense of the concept by considering the differences between the two images and their ideas about why this occurred. Students discuss their thinking with their partners. Students consider how we could use the rise and fall of the ocean to our advantage as humans. For example, in lesson 6.13B, Basic Characteristics of Organisms, students view an image of a messy room. Students then imagine that they have to clean up their room before they are allowed to spend time with friends at a movie theater. Students turn and talk about the methods they use

as they consider how they begin to clean up their room. Students think about a system they follow when cleaning their space and how they organize each item in a specific place. Students recognize that sorting items allows them to see what they have and better determine where things belong This activity helps students make sense of ways scientists group organisms.

- In the Lesson Guide for Seasons 6.9A, students first engage with the seasons by planning an imaginary vacation and have to research the season, climate, and time of year in which they'd wish to travel to their destination, demonstrating an engagement in phenomena. They then move through a series of activities, labs, and models where they understand the causes and locations of the seasons. Each activity is progressively more challenging. Materials support students to act like an engineer and can learn from the engineering design process. For example, students design and make their working models of phenomena. In 6.9A, students design and create a working model that shows Earth's revolution around the Sun.
- 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. For example, in the lesson Management of Air, Water, Soil, and Energy Resources (6.11B), students complete the EPA EnergyStar activity How Big Is Your Carbon Footprint? In the Water Conservation Innovation Challenge, students are “hired” as engineers by restaurants to lower their washing costs by decreasing water usage while increasing efficiency. In the Farming Models activity, The teacher assigns student groups one type of farming used for soil conservation. They research the method and build a model. The models display around the room, along with a paragraph-long explanation. Then students do a gallery walk to learn about the different farming methods. As an extension, host a debate in which students determine the best farming model. In the Energy Star Appliance Ad activity, students research Energy Star appliances. They choose one type of appliance and create a magazine ad convincing people to make a replacement in their home. The ad includes information about how the appliance works to conserve energy or make its use more efficient and compares the cost differences over time.

Summit K12 Dynamic 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. Materials provide opportunities for students to construct and present developmentally appropriate written and/or verbal arguments that justify explanations to phenomena and solutions to problems using evidence/guidance acquired from learning experiences.

Evidence includes but is not limited to:

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

- The materials provide opportunities for students to develop the use of how to use evidence to support their claims. A phenomenon Sensemaking Guide will be added for each TEK to help students gain an understanding of different phenomena. The Sensemaking Guide prompts students to collect evidence, collaborate, and revise their model. In the Teacher Resources is a document called Science Writing/CER; this 20-page document explains the use of the CER writing prompts and grading rubrics with students. It also gives several different examples. Students are given a situation or asked to use the e-book. Then, they are given a prompt or question. They are asked to form their claim, cite evidence, and share their reasoning.
- Middle school students gain extensive experience writing evidence-based explanations for their hypotheses and claims with CER opportunities. The CER model includes an overview, sample, graphic organizer, and detailed rubric. The materials specifically prompt students to use evidence when supporting their claims. For example, in the Chemical Reactions Stations lab investigation, students are asked to gather evidence based on their observations, decide whether it represents a physical or chemical change, and then use their evidence to explain or justify their choice. Students are given a data table for each station to assist them with gathering

evidence and writing their explanations. The materials allow students sufficient opportunities to write a hypothesis and then support it with evidence.

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

- Materials include embedded opportunities to develop and utilize scientific vocabulary in context. The materials present scientific language using multiple representations. For example, teachers may locate the Vocabulary Mastery section on the course homepage. The Vocabulary Mastery lessons match the content lessons for ease of use. Each lesson contains a visual representation and an interactive feature where students choose a correct word to help define the vocabulary term. For example, in 6.10 C Metamorphic, Igneous, and Sedimentary Rocks, an image of an erupting volcano is presented above the sentence, “Lava flows down the sides of the volcano after a/an _____.” Students choose which word (*explosion, eruption, disruption,* or *reduction*) best completes the description.
- For example, all TEKS lesson videos include visual content vocabulary introduction and review. In lesson 6.7C, Newton’s Third Law of Motion, students see the lesson's vocabulary in action during the video. The vocabulary terms: *magnitude, simultaneous force pair,* and *Newton's third law of motion* are included in the lesson components as students observe teacher demonstrations of importance and action-reaction. Students also develop and use content vocabulary through Newton’s Third Law station activities.
- The materials include opportunities to develop and use vocabulary after having a concrete or firsthand experience to which they can contextualize new terms. For example, in the Lesson Guide for 6.8A on Gravitational, Elastic, and Chemical Potential Energies, the students first look at demonstrations and work through two lab investigations, Kinetic Cans, and Potential Energy Investigation Stations, before asking to use the essential vocabulary for a card sort and discussion prompt.
- The materials present scientific vocabulary using multiple representations. For each TEKS, there are e-books that both define the vocabulary words and give examples in context. There are videos over each concept incorporating key vocabulary terms and study guides that go over core vocabulary. Additionally, an e-poster stresses essential vocabulary and Vocabulary Mastery activities for all grade-level TEKS and supports TEKS from previous grades.
- The Science Literacy section has a section on Vocabulary Mastery that breaks down into categories. Within the categories is a lesson on each TEK, including scaffolded TEKS from previous years. The vocabulary lesson on Biotic and Abiotic Factors (6.12A) includes a picture with a sentence description of a word that the student must select from a drop-down menu. They can click to turn over the flashcard to see the definition (abiotic factors, biotic factors, competition, dependence, ecosystem, food source, organism, population, resource, soil composition, species, survive, temperature). For example, 13 e-books in grade 6 include graphics and words to describe vocabulary. At the beginning of each e-book, there are vocabulary boosters (in English and Spanish) with a picture, a word, and a definition that students may read aloud. The e-books contain drop-down questions to help develop vocabulary within the context. There are also open-ended question types that include word banks.

Summit K12 Dynamic Science Grade 6

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

- The materials integrate argumentation and discourse within stages of the learning cycle. For example, in the Lesson Guide for 6.13A, Cell Theory, there is an activity called Two Truths and a Lie. In this activity, students must write two facts and one false statement about Cell Theory. Students then take turns sharing their statements and trying to identify which statement is false. They then work together to rewrite the false statements and make them accurate.
- The materials provide opportunities for students to develop how to practice argumentation and discourse. The materials include a set of lessons on Science and Engineering Practices. There is a lesson on the Use of Evidence to Communicate Findings. The Skills Companion for this lesson explains argumentation, gives an example of how it works, and then asks the students to practice with two scenarios. Key elements of scientific arguments using evidence are listed, including a claim, evidence, reasoning, counter-argument, and conclusion. The presentation also includes activity examples to use with students, such as collaborating with classmates to find a solution to minimize the browning of sliced apples or determining the best use of a given set of materials in keeping a beverage warm. An accompanying vocabulary activity also reviews the key concepts involved in argumentation.
- In the lesson Management of Air, Water, Soil, and Energy Resources (6.11B) in the Water Conservation Innovation Challenge activity, students are "hired" by a group of restaurants to lower their washing costs by decreasing water usage while increasing efficiency. In this innovation challenge, students create a new technology to help restaurants conserve water by using it more efficiently. Students brainstorm, design, build, and test their prototypes to do this. From the test results, students respectfully argue against other contractors, explaining why a selection of their innovation is best. In conclusion, materials ask students to evaluate their engineering design and reflect on methods used by writing a summary to describe what they might do differently to improve their prototype.
- Materials integrate argumentation and discourse throughout to support students' development of content knowledge and skills as appropriate for the concepts and grade level. For example, in the lesson Evidence of a Chemical Change (6.6E) in the activity Mystery Powders Investigation, students write a conclusion identifying the names of substances A, B, C, and D. They include evidence from the data table and scientific reasoning that justifies their answer. They must also explain any evidence of a chemical change.

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

- The materials provide opportunities for students to justify explanations of phenomena and solutions to problems using written and verbal arguments to problems using evidence acquired from learning experiences to a certain extent. A phenomenon Sensemaking Guide will be added for each TEK to help students gain an understanding of different phenomena. The Sensemaking Guide prompts students to collect evidence, collaborate, and revise their model. The CER model includes an overview, sample, graphic organizer, and detailed rubric. For example, in the Lesson Guide for 6.6A, Compare Solids, Liquids, and Gases, students will create their notes on the properties of atoms and molecules within each state of matter. Using their notes, they then work with a partner to explain why liquids and gases have no fixed shape. Students are given

multiple opportunities to create arguments to explain phenomena studied in class The teacher and student resources provide guiding criteria for developing a scientific argument, such as rubrics or checklists.

- Materials prompt students to use evidence to support their hypotheses and claims. They provide criteria for defending a solution to problems by utilizing the Sensemaking Guide. The Phenomenon Sensemaking Guide supports opportunities for students to construct and present developmentally appropriate written and verbal arguments that justify explaining phenomena and/or solutions to problems using evidence acquired from learning experiences.Each unit begins with a phenomenon. Students use the Phenomenon Sensemaking Guide as a graphic organizer to document their learning. The lessons and investigations build in depth and complexity and include SEPs and RTCs as students progress in sensemaking and culminate in a final evidence-based explanation of the phenomenon with an accompanying model. Each TEKS unit includes at least one CER writing opportunity through this Sensemaking Guide. For example, the Science and Engineering Practices section has a lesson called Use Evidence to Communicate Findings. The lesson includes a Skills Companion PowerPoint that goes through the CER method, which is the same for grades 6-8. The activity at the end of the PowerPoint lesson is also the same for all grade levels. The lesson also includes a Vocabulary section where students use a drop-down to select the word to complete the sentence; then, students can flip the card to review the word's definition. Grade 6 reviews five words (*evidence, collaboratively, idea, principle, argumentation*), while grade 8 includes eight (*theory, model,* and *empirical evidence*).
- There is guidance for the teacher to explain how to construct verbal/written arguments. The CER documentation in the Teacher's Guide includes information about the CER model. This document explains the CER model, including a graphic organizer and sample scoring rubric. For example, in the lesson Forces Acting on Objects (6.7A), the activity Identifying Forces, students analyze each scenario and discuss with a partner whether each example shows normal force, applied force, gravity, and friction. Students volunteer to provide reasoning for each example. In the activity Magnet Magic, student pairs or groups investigate what happens when magnet poles attract or repel each other. Students create a magic trick involving the magnets to present to their classmates. As students present, the rest of the class makes notes on the trick and describes how they think it happened. After all, groups present and collectively discuss how they believe each trick occurred

Summit K12 Dynamic 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.	PM
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.	M
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 some teacher guidance on anticipating student responses and using questioning to deepen student thinking. Materials include some teacher guidance on scaffolding, supporting students' development, and using scientific vocabulary in context. Materials provide 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 that provide teacher guidance on anticipating student responses and the use of questioning to deepen student thinking.

- The materials provide teachers with some student responses to questions and tasks. For example, in lesson 6.6C, students identify elements on the periodic table as metals, nonmetals, metalloids, and rare Earth elements based on their physical properties and importance to modern life. Students examine everyday items' illustrations and document the item's name, use, and materials from which it derives. Materials direct the teacher to use prompts, such as "Have you ever used pennies? Think about the materials that were used to make this item. Which element from the periodic table is used as a component to make this product?" The Teacher's Guide for this activity informs the teacher on some student responses but does not provide guidance for when student responses are outside of what is expected.
- The materials sometimes provide teacher responses to possible students' responses, including how to build on students' thinking. For example, in lesson 6.9A Seasons, students model and illustrate how the tilted Earth revolves around the Sun, causing seasonal changes. In the lesson opener, students choose a destination to which they plan an imaginary vacation. They research the season and climate during the time of year they wish to travel and create a packing list. Students also choose 1-2 activities to do during the trip. Students share their destination, time of year, expected climate, and an activity and packing list. Afterward, the teacher asks questions

to build on students' thinking. For example, "What activities are available to participate in during that time of year? Do the activities depend on particular weather, such as snow skiing? Did anyone discover a place whose climate does not change much from season to season? Where on Earth is it located? Why is it important to understand the predictable pattern of seasons?" The teacher is encouraged to guide students in finding patterns between a place's location and its climate from season to season but doesn't provide questions to guide or deepen student thinking.

- Materials provide some teacher guidance in anticipating student responses and using questioning to deepen student thinking. For example, in the lesson Cell Theory (6.13A), the teacher's Lesson Guide provides multiple opportunities for questions in the Engage and Establishing Relevance activity. Materials offer an example for the Graphic Organizer activity, so teachers know what to expect and look for in student responses to the task. However, there is no teacher guidance when responses lie outside those expected in the graphic organizer answer key and there is no additional strategic questioning to deepen students' thinking on the topic.

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

- The materials provide some embedded support for the teacher in introducing and scaffolding students' development of scientific vocabulary. However, this is sometimes provided out of context. The Concept Mastery section on the program's home page requires students to achieve vocabulary mastery. The first teach-lesson sequence requires students to get 80% or better on the vocabulary before completing Formative Assessment 2. The assessments include embedded supports, such as a context sentence and image with audio support, a Spanish scaffold, the part of speech, and a grade-appropriate definition. If the student does not master the vocabulary on the first attempt, they can make a second attempt. Images dynamically change on the second attempt to prevent memorization and focus on learning. While this is some support for vocabulary development, it is outside the context of the lesson.
- The materials provide some support for vocabulary development in the context of the lesson and some support out of context. For example, the materials include an e-poster for each lesson that illustrates the core vocabulary for that lesson. For example, in lesson 6.13B, Basic Characteristics of Organisms, the content vocabulary: *autotrophic, eukaryotic, heterotrophic, multicellular, photosynthesis, prokaryotic,* and *unicellular* are represented by simple, clear illustrations. However, the materials also provide the Science Literacy-Vocabulary Mastery section, including all content and instructional vocabulary. Students may access the vocabulary mastery section at any time to practice and master their language. Teachers can view the number of attempts in the teacher reports. This is something students must leave the lesson experience for and then return to the context of the lesson.
- The materials provide limited embedded support for the teacher in introducing and scaffolding students' development of scientific vocabulary. At the beginning of a teacher Lesson Guide is a list of Core Vocabulary students will work with during the lessons. For example, for 6.7A, the core vocabulary consists of: *applied force, force, friction, gravity, magnetism,* and *normal force*. Later, in the Teach and Discuss section, definitions, explanations, and examples for these terms are given to the teacher, but there is little guidance on how to help students engage with and master this vocabulary.
- Materials include some teacher guidance on scaffolding, supporting students' development, and using scientific vocabulary. For example, the Lesson Guide provided for each student's expectation provides key concepts with bolded vocabulary. The lesson Compare Solids, Liquids,

and Gases (6.6A) in the teacher Lesson Guide provides some scaffolding opportunities to use scientific vocabulary. A few key concepts are introduced, followed by the Modeling Atoms and Molecules activity (also identifying a misconception). Then, more key concepts and terminology are added, followed by more activities and misconceptions. However, this is a pattern of looking at vocabulary in isolation, then engaging in content activities, then revisiting vocabulary rather than addressing vocabulary within the context of the lesson.

- The materials provide some embedded support for the teacher in introducing and scaffolding students' development of scientific vocabulary. At the beginning of a teacher Lesson Guide is a list of Core Vocabulary students will work with during the lessons. For example, for 6.7A, the core vocabulary consists of: *applied force, force, friction, gravity, magnetism,* and *normal force*. Later, in the Teach and Discuss section, definitions, explanations, and examples for these terms are given to the teacher. While this is necessary information, it does not provide teacher guidance in how to scaffold students and support students in developing mastery of the vocabulary in the context of the lesson.

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

- The materials provide support for teachers to deepen student thinking through questioning by including the Summit K12 Questioning Guide. Guidance is given to ask questions to clarify thoughts, hold class discussions, or ask questions to dig deeper during an activity, such as during a lab.
- The materials provide teacher support to prepare for student discourse. For example, there are grade 8 samples that provide insight into how each middle school TEKS unit will include phenomena and sensemaking. Teachers in each grade will use these documents to guide student thinking as they work to make sense of phenomena. Specifically, each TEKS will include a phenomenon, and students will work through the Phenomenon Sensemaking Guide as they build understanding through investigations, readings, and discussions. Teachers will guide and scaffold this sensemaking through questioning and discourse.
- The materials provide teacher supports to prepare for student discourse. For example, in the program's supplemental resources, Introduction to Science slides are available for teachers to use with students. The Scientific Conversations section's learning objectives are: to communicate scientific ideas clearly and express thoughts effectively. The next slide goes further into the scientific conversation by listing the following components: making observations, asking questions, communicating with others by sharing, listing or responding, and drawing conclusions. Another slide in this set discusses the importance of sharing information in science. It mentions, "Science is never based on the ideas or experimentation of a single person. Scientists work together and must be able to communicate clearly and respectfully." The slide gives tips for sharing, such as: being brief, being clear, providing an example, and speaking clearly.
- The materials provide general question stems for supporting student discourse and using evidence in constructing written and verbal claims. The question stems include: "Can you explain to me__? What do you think__? What evidence do you have__? Are you saying__? I agree with__ because__. I respectfully disagree with__ because__."
- The materials provide guidance that teachers can use to provide feedback to students while engaging in discourse. Materials include guiding questions for teacher use during the engage portion of lesson 6.8A Gravitational, Elastic, and Chemical Potential Energies. Students observe teacher demonstrations involving toy car ramps, rubber bands, and batteries. Students answer

general questions, such as, “Which block will move farther when the car hits it? How far do you think the rubber band will go without letting go of the rubber band? Do you think the rubber band will travel farther than the first time? Can a small battery, such as the one used in this demonstration, power a larger object, like an electric car?” Teachers then prompt students to discourse during think-pair-share and respond with evidence supporting their claim.

- For example, the Science and Engineering Practices section has a PowerPoint called Use of Evidence to Communicate Findings, which gives an overview. The CER Model includes an overview, sample, graphic organizer, and rubric. In the lesson Forces Acting on Objects (6.7A) in the activity Identifying Forces, students analyze each scenario and discuss with a partner whether each example shows normal force, applied force, gravity, and friction. Students volunteer to provide reasoning for each example. In the activity Magnet Magic, student pairs or groups investigate what happens when magnet poles attract or repel each other. Students create a magic trick involving the magnets to present to their classmates. As students present, the rest of the class makes notes on the trick and describes how they think it happened. After all, groups presented and collectively discussed how each trick occurred. In the activity Chain Reaction Machine, students use a rubric to create their own Rube Goldberg Machine using examples of gravity, friction, magnetism, applied force, and normal force.

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

- Materials support and guide teachers in facilitating the sharing of students’ thinking and finding solutions. The materials provide teacher support and guidance to engage students’ thinking in various modes of communication throughout the year. Materials provide examples of exemplars of student-written responses. Teachers can use the exemplars as a guide to help them facilitate students showing their thinking in a written form. In lesson 6.6D Density, students complete a KWL chart based on pictures of everyday items. In the “I know” column, students write down observations about the phenomenon or things they already know. In the “I wonder” column, students write down things they wonder about the phenomenon, especially regarding density. The “I learned” column is left blank. Students return to it at the end of the unit and write a CER to explain the phenomenon based on what they learned. The teacher’s guide provides guiding questions to prompt student thinking and exemplar written responses.
- The materials provide teacher support for facilitating the sharing of students’ finding solutions. Materials provide feedback tips and examples teachers can use to support students throughout the learning cycle. In lesson 6.10C, Metamorphic, Igneous, and Sedimentary Rocks, the teacher shows the article “Discovery in Antarctica” to students. Partners use the clues to determine what scientists concluded about Antarctica’s past. Students share their conclusions with the class before the teacher reveals the answers.
- The materials provide exemplars of students' written responses to assist the teacher. Numerous labs and activities include teacher guides to activities. The Teacher's Guides give correct student answers to questions, discussion prompts, diagrams, and summaries. For example, in the Teacher's Guide for The Egg and the Earth, pages 2 and 3 give example answers to the questions and sample labeled diagrams of the ones students were asked to make during the activity. In the lesson Balance and Unbalanced Net Forces (6.7B) in the Balance or Unbalance Investigation, the answer key provides teachers guidance on how to conduct a gallery walk and facilitates the sharing of students' thinking.

Summit K12 Dynamic 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.	M
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

Meets | Score 2/2

The materials meet the criteria for this indicator. 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. 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.

- In the 5E Model slide presentation located within the Teacher's Guide on slide 59, the materials state that students are evaluated in a variety of formats as follows: a Formative Assessment by TEKS, Vocabulary Mastery Digital Flashcard Step, Study Guides - Print and Interactive, Science Literacy Assessments and Self Assessments, Assessment Bank and Lab Investigation write-ups. Materials include formative assessments to measure student learning. During a unit of study, students are assigned online practice. Students begin with Formative Assessment 1 and then watch a TEKS video lesson before moving on to the TEKS vocabulary section; the materials provide multiple attempts to achieve at least 80%. This score is required to unlock the second formative assessment. Formative Assessment 2 is an entirely different set of items from Formative Assessment 1. Teachers can choose to assign lower grade level vertically aligned scaffolds as needed to differentiate instruction.
- The materials include formative assessments to measure student learning and determine the next steps for instruction. Inside the Concept Mastery module are several formative assessments for each grade level TEKS and supporting TEKS from lower grades. According to the Concept Mastery explanation page in the Teacher Resources, students are assigned Formative Assessment 1 once learning has begun on a particular TEKS. Further into the learning process,

students watch a TEKS Video and take a Vocabulary Assessment. Scoring at least 80% on the Vocabulary Assessment unlocks Formative Assessment 2. Materials provide students with multiple attempts to reach the 80% minimum score required. Formative Assessment 2 contains a different set of questions than Formative Assessment 1.

- The Teacher Resources contain an eight-page document about the Assessment Bank. This document shows how teachers can create their custom assessments using a variety of question types found in the Assessment Bank. Teachers access the Assessment Bank by going to the Concept Mastery module and clicking the Assessment Bank icon. Materials include assessments that include formal and informal opportunities to assess student learning in various formats. For example, in Concept Mastery, there are Formative Assessment 1, Vocabulary, and Formative Assessment 2. Teachers may reference these assessments in the Evaluate section of the 5E lesson model. These assessments could be used as diagnostic, formative, or summative; however, they are called “Formative” in the material. With the 5E model lesson guides, numerous informal and formal opportunities exist to evaluate students. Assessment opportunities include but are not limited to hands-on investigations, virtual simulations, science literacy guided readings, and study guides.
- Within the materials, Summit provides examples across grade levels to enhance student understanding. The summative assessment provided will assess student knowledge and assist teachers in evaluating student mastery of scientific concepts.

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

- As the TEKS outlines, the materials assess all student expectations by grade level. The materials contain a cohesive scope and sequence that maps out and outlines what teachers will teach in a specific course or grade level. For example, each TEK outlines the lesson components of the 5E Model: Engage and establish Relevance, Key Concepts, Apply/ Extend, and Evaluate. Within each component are the relevant activities of that component and the approximate time each activity will take to complete.
- The materials indicate which student expectations are assessed. For example, activities are listed by TEK for study guides, lesson guides, and formative assessments. Lessons and their related activities and assessments are available for each TEK. These lessons contain information within four reporting categories: Matter and Energy, Force, Motion and Energy, Earth and Space, and Organisms and Environments. Teachers may assess the student expectations within the introduction of each lesson as well as in the scope and sequence of the materials.
- The materials assess all student expectations, as outlined by the TEKS, by grade level. The teacher resources contain a cohesive scope and sequence that maps out and outlines what instruction teachers will deliver in the 6th grade. The scope and sequence are organized by reporting category and TEKS to ensure all TEKS are covered over the year. The correlating teacher lesson guides are written for one specific TEKS at a time and include an Evaluate section that consists of the four components used to assess student mastery of the TEKS covered in that unit - Formative Assessment 1, TEKS Video, Vocabulary Review, and Formative Assessment 2.
- The materials indicate which student expectations are assessed. The Concept Mastery module breaks down by reporting category and TEKS. There are multiple assessments for each TEK, both on grade level and from supporting grade levels. For example, teacher lesson guides are grouped by reporting category and then by TEK. Each TEK has a lesson guide following the 5E model to teach and assess student knowledge.

Summit K12 Dynamic Science Grade 6

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

- The materials include assessments requiring students to integrate scientific knowledge and science and engineering practices with recurrent themes appropriate to the student's assessment expectation. For example, in lesson 6.6B, each student receives a plastic bag filled with snack mix. The students describe the bag's contents and answer, “What do you think? Are the contents in the bag a pure substance? A mixture? something else?” Students separate the snack mix into individual types of snacks/components and describe each component. Students engage in a think-pair-share to collaboratively compare the components, using their descriptions of each snack to support their discussion and to consider whether the properties of each substance/snack item change when mixed in the bag.
- Another example is found in lesson 6.12A. Students complete a T-chart in their student notebooks while viewing an image of an ecosystem. They fill each column with the biotic and abiotic factors they observe from the image. They share how they sorted each column with their group. Then, using the ecosystem image from the T-chart activity, students create a flowchart that represents the differences between organisms and populations within an ecosystem. Students draw the flowchart in their student notebooks or create a digital version. Students also identify a biotic factor and an abiotic factor they compete for.
- The materials include assessments that integrate scientific concepts and science and engineering practices. For example, the Apply and Extend section of the lesson guide for 6.7B consists of an activity called Real-Life Diagram Analysis: Group Project. The project explains, “Students will create, analyze, and diagram examples of balanced and unbalanced forces by drawing force arrows, calculating net force, and describing the object's motion.” The materials indicate that SEPS 6.2C, 6.3A, and 6.3B are available for teachers and students.
- Materials include assessments integrating scientific concepts and science and engineering practices (SEPs). For example, in the lesson Cell Theory (TEKS 6.13A) in the Teach and Discuss section, there is an activity titled Microscopy Lab. In the activity, students replicate the studies of the Cell Theory scientists and view similar objects under microscopes to see how these scientists made their discoveries and contributed to the cell theory. The lesson guide identifies the SEPs assessed as 6.1D, 6.1E, 6.1F, 6.3A, and 6.4A.

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

- Materials include assessments that require students to apply knowledge and skills to a new phenomenon or problem. For example, in lesson 6.6C Identify Metals, Nonmetals, Metalloids, and Rare Earth Elements, students use their knowledge of metals, nonmetals, metalloids, and rare earth elements to upgrade an existing product and make it more cost-effective. In this extension activity, students improve outcomes based on element properties. Students obtain a scenario card with a product used in modern life. Each product has a current problem that can be solved using an additional element. Materials also include a list of elements and their properties. Their goal is to increase product performance while reducing costs.
- Another example is from lesson 6.11B, Management of Air, Water, Soil, and Energy Resources, in the Air Pollution Lab. In this lab, students measure and compare pollutants found at four locations to assess the air quality. Students perform mathematical calculations of addition, subtraction, and averaging to determine relationships in the data. Students create four “pollution catchers” to assess the air quality at four locations. Each group member chooses a different location. Students choose places like the classroom, the kitchen, a bathroom, a

bedroom, the playground/park, an air filter, a busy road, a factory or power plant, etc. Students hang notecards with a thin layer of petroleum jelly to catch particulate matter. Students hypothesize where they think the area will collect the most particulates. After a determined period, the cards are retrieved and analyzed.

- The Engage activity for 6.12B over Ecological Relationships asks students to look at pictures of an osprey and a fish, a clownfish and an anemone, a mosquito and a human, and a remora and a shark to begin looking at relationships between organisms. The Apply and Extend section has four activities for the students to complete. These activities ask the students to apply their knowledge of connections to new organisms, such as in the Predator-Prey Math activity, which looks at the relationship between wolves and rabbits.
- The materials include assessments that require students to apply knowledge and skills to novel contexts. The Concept Mastery module contains two formative assessments that each have ten questions. The questions need students to use their knowledge and skills in contexts different from the ones used in the regular lesson materials. Additionally, the question contexts for Formative Assessment 1 are different from those for Formative Assessment 2, providing a wide variety of new ways for students to apply their knowledge and skills.

Summit K12 Dynamic 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.	PM

Partial Meets | Score 1/2

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

Materials include information 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. Materials provide some variety of resources without 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.

- Materials include information and/or resources that provide guidance for evaluating student responses. The Teacher's Guide includes a link to a document for Science Writing/CER. Inside this document, on page 12, it shows a scoring rubric for a Short Constructed Response. The Science Writing/CER module includes a rubric along with short constructed responses.
- Materials include resources for evaluating student responses. Student activities only have answer documents that give the correct answers. A few assignments contain a rubric to guide the teacher in evaluating a student's response. For example, the Apply and Extend section of 6.6D on Density includes a "Galileo Thermometer..." activity. Page 4 of the Teacher's Guide for this activity consists of a rubric for scoring the student's essay on how a Galileo thermometer works. Several activities are provided with accompanying rubrics in Reporting Category 1, Apply and Extend activities. For example, in 6.6C "Finding the Elements," students are able to apply what they have learned to elevate understanding.
- Materials include information and/or resources that provide guidance for evaluating student responses. For example, the lesson Management of Air, Water, Soil, and Energy Resources (6.11B) has an activity titled Public Service Announcement. Students create a PSA educating people on ways to help manage our resources. Student groups choose one resource to inform people of. Students make a product, such as a brochure, flier, commercial, podcast, magazine

page, or social media campaign. A basic rubric gives 25 points for “students demonstrating an understanding of the topic, and the message is based on true and accurate information.”

- Materials include information and/or resources that provide guidance for evaluating student responses. For example, the lesson Management of Air, Water, Soil, and Energy Resources (6.11B) has an activity titled Field Testing for Ozone. Students simulate ground-level ozone and observe the effects it can have. There is a procedure and a list of questions. Every TEKS includes a Study Guide that includes an answer key. For example, the lesson Management of Air, Water, Soil, and Energy Resources (6.11B) has an activity titled Field Testing for Ozone. Students simulate ground-level ozone and observe the effects it can have. There is a procedure and a list of questions.

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

- Materials provide guidance documents and resources to support teachers' analysis of assessment data. For example, guidance is found in the materials Teacher's Guide. Materials include assessment tools that yield data teachers can quickly analyze and interpret. Teachers may access these tools in the “Reports and Dashboard” section of the Teacher's Guide. The materials provide guidance documents and resources to support the teacher's analysis of assessment data. The Teacher's Guide has a space titled “Reports and Dashboards.”
- For example, the Dynamic Science Teacher Reports Dashboard displays reports for Concept Mastery, Vocabulary Mastery, Usage Mastery, and etc. The Concept Mastery dashboard shows TEKS mastery by class and individual student. Specifically, for TEKS 6.1A, the table lists scores for formative assessment #1, vocabulary mastery step, and formative assessment #2. Each TEKS is organized in this manner. The teacher can select the individual student’s name to view that student’s Concept Mastery Report with all TEKS across all categories.
- The materials provide assessment tools that result in data reports that teachers can use to track student progress. Teachers can generate reports for Concept Boosters and Vocabulary Boosters. These reports show the score the student earned on their assessments. Each assessment covers only one TEKS, which allows the teacher to see how a student is doing on each specific TEKS. The reports can be generated for individual students or entire classes. Under reports in Content Mastery, a teacher can see first-attempt, vocabulary, and second-attempt scores by TEKS. This report can be seen individually or by class. A teacher can download it. They can manipulate the report into an Excel spreadsheet with colors or groupings.
- Additionally, materials include an “Assessment Bank” document that provides support to teachers’ analysis of assessment data to respond to students’ individual needs. For example, the “Assessment Bank” shows a screenshot of a Concept Mastery assessment screen, showing that student scores are color-coded to show levels of mastery by skill (TEKS). A student that “masters” the assessment would have a green score, “meets” would have a blue score, and “approaches” would have a purple score, making data viewing easier for the teacher. The “Assessment Bank” document also provides information about how teachers can respond to the individual needs of their students by creating custom “assessments on demand using content and items students have never seen before.”
- Materials include assessment tools that yield data teachers can easily analyze and interpret through “Personalized Learning” plans in the “K12 Dynamic Science Design” under the Differentiation and Acceleration section. The “Personalized Learning” plans consider vertically aligned scaffolded content 1-2 grade levels below and create a comprehensive on grade level

course by embedding the appropriate lower grade scaffolds and extension activities to support differentiation and acceleration.

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

- The materials provide ways to use the information gathered from assessment tools to plan instruction further. It is unknown if the information gathered from the assessment tools helps teachers plan differentiated instruction. Materials provide teachers with the ability to use assessment reports to analyze data. The color coding in the reports allows teachers to easily group students based on need. Based on this assessment data and best teaching practices, the teacher can group students within the LMS to reflect the teacher's in-class grouping. This allows teachers to differentiate student learning. Teachers can generate reports on students' Concept Boosters and Vocabulary Boosters scores.
- The materials provide ways to use the information gathered from the assessment tools to help teachers when planning differentiated instruction. Formative assessments and vocabulary assessments are available for supporting standards from lower grades. The reports generated allow teachers to see how students scored on these assessments. The materials provide lesson guides for teachers to use with students who did not show mastery of the lower grade level TEKS. Assessment tools yield information for teachers to use when planning instruction, intervention, and extension. For example, there are reports on Concept and Vocabulary Mastery. Within the lesson guides for each TEKS, there is an Apply & Extend section. Teachers may utilize scaffolded TEKS from previous grade levels for student intervention. Assessment tools yield information for teachers to use when planning instruction, intervention, and extension.

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

- Materials provide some activities for teachers to respond to performance data. The program includes scaffolded lessons embedded with the relevant on-level TEKS. The materials include study guides, videos, eBooks, vocabulary practices, etc. These materials are available for all TEKS on the current grade level and for lower grade supporting TEKS. Students are assigned these materials by the teacher as needed. For example, in reporting category four, Organisms and Environments, teachers can use a 5th-grade level lesson, two 6th-grade level lessons, and three 7th-grade level lessons to help fill in any gaps students may have with the 8th-grade content to prepare them for the 8th-grade Science STAAR.
- Materials do not provide teacher guidance for responding to student data. For example, no teacher guidance document explains how teachers can use the data from a diagnostic assessment to plan small-group instruction to address gaps in learning. Also not found are supplemental teacher guidance documents to support teachers in developing action plans. While there are activities in the program to assign students when they have difficulty answering assessment questions, there is no guidance for the teacher on when students should complete them.
- The materials do not provide teacher guidance for responding to student data. For example, they do not provide guidance documents that explain how to use data to plan for small group instruction to address learning gaps or provide tables, markers, or icons to specify which activities teachers should assign to students who did not perform as expected on assessments.

Summit K12 Dynamic Science Grade 6

- Materials provide a variety of resources and some teacher guidance on how to leverage different activities to respond to student data. For example, within the lesson guides for each TEKS, there are a variety of activities teachers can use with students. The lesson guide for Global Patterns of Air and Weather (TEKS 8.10B) has twelve activities before the evaluation step, including labs, a study guide, research, and a demonstration.
- Materials provide a variety of resources and some teacher guidance on how to leverage different activities to respond to student data. For example, there is no teacher guidance for responding to data. There are no suggestions for grouping, action plans for filling in the gaps, or suggested activities for when students are having difficulty.

Summit K12 Dynamic Science Grade 6

Indicator 6.3

Assessments are clear and easy to understand.

1	Assessments contain scientifically accurate items, avoid bias, and are error-free.	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.	PM
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

Partial Meets | Score 1/2

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

Assessments contain scientifically accurate items, avoid bias, and are free from errors.s. 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 some 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 that contain scientifically accurate items, avoid bias and are error-free.

- Assessments contain items for the grade level that are free from errors. The formative assessment questions are free from errors. For example, question 1 of Formative Assessment 1 for 6.7B contains a diagram labeling the forces applied to a wheelbarrow. The units of measure are correct (60 N and 16 N). The answer choices also have units of measurement and directional statements to describe how the wheelbarrow should move. All units of measure are correct, the correct answer is present, and the directional statements match the movement and force measurements given in the diagram. Assessments include items that are dual-coded with content TEKS and RTCs or SEPs. In 6.6A, arrows are backward instead of forward.
- Assessments contain items for the grade level that are scientifically accurate. Formative assessments 1 and 2 include items that align with the objectives taught and present grade-level content and concepts for each specific unit. For example, the second Earth and Space module unit is over ocean tides, 6.9B. The assessment questions in Formative Assessment 2 cover ocean tides and closely related items such as gravitational pull and moon phases. For example, question 3 contains a diagram of the Sun, Earth, and Moon phases. The chart includes labels for the first-quarter moon, third-quarter moon, lunar tide, and solar tide. All titles on the diagram are scientifically correct, as is the image of the Earth (from the North Pole view) and the direction of Earth's rotation as indicated by the curved arrow.

Summit K12 Dynamic Science Grade 6

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

- Assessment tools use clear pictures and graphics. An example includes the accurate use of photographs of plant and animal species, such as the chili penguin pepper plant and a Northern mockingbird, in an assessment question about symbiotic relationships.
- Assessments contain pictures and graphics that are developmentally appropriate. For example, an assessment item on potential and kinetic energy displays three springs in different states: static, stretched, and compressed. The illustrations do not contain unnecessary clutter and are realistically drawn so students can focus on the science when determining the best answer choice.
- Assessments use clear pictures and graphics. For example, question 4 in Formative Assessment 2 for 6.12A contains a graphic of a food web. Each organism in the food web is accurately drawn and labeled. The food web is of appropriate complexity for a 6th grader, with all arrows clear and easy to follow. The food web is in color, not black and white, and the colors are easy to look at in shades of green, gray, and brown.
- Assessments contain pictures and graphics that are developmentally appropriate. For example, question 5 in Formative Assessment 1 for 6.7B contains a photograph of two teenagers playing air hockey. The teenagers are approximately the same age as 6th graders. The background of the photograph has been blurred to keep the focus on the air hockey table and puck, which is the focus of the assessment question.
- Assessment tools use clear pictures and graphics that are developmentally appropriate. For example, Formative Assessment 1 for 6.6E (Evidence of a Chemical Change) used developmentally appropriate pictures and graphics that do not provide any unnecessary details that would confuse or be too much for a 6th grader.
- Assessment tools use clear pictures and graphics that are developmentally appropriate. For example, Formative Assessment 1 for 6.9A (Seasons) used developmentally appropriate pictures and graphics that do not provide any unnecessary details that would confuse or be too much for a 6th grader.

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

- Materials guide teachers somewhat to consistently and accurately administer assessment tools. Materials include a distinct section in the teacher's guide that informs the teacher in understanding the assessment items students will encounter. For example, in the Concept Mastery section of Category 1, Matter and Energy, the Lessonslist categories: Formative Assessment 1, TEKS Video, Vocabulary, and Formative Assessment 2. The Lesson Guide for each task is within the Teacher Resources section. The Evaluate section states, "Students log into Summit K12 to master learning and assess understanding using the following components: Formative Assessment 1, TEKS Video, Vocabulary Review, Formative Assessment 2." The lesson guides do not guide teachers on when to administer the formative assessments of the program.
    - The materials offer some guidance to teachers on when to administer assessments. Assessments are contained within the Content Mastery module. The teacher guidance document for the Content Mastery module contains 30 slides. Slides 3 through 10 demonstrate how a teacher can access the lesson guides for TEKS and show what the lesson guides look like. The example lesson guide on slide 9 shows that the teacher will utilize Formative Assessments 1 and 2, the TEKS Video, and Vocabulary Review during the Evaluate portion of the lesson. Slides 11 through 17 show how to navigate to the study guides and E-Posters and contain examples of both. Slides 18-30 explain how to

navigate to the Concept Mastery section and find Formative Assessments 1 and 2 and the TEKS Video and Vocabulary assessment. They contain examples of each type of assessment and the steps for the order in which they are to be given to students. For example, slide 21 says, “Step 1: Begin with Formative Assessment 1.” On slide 25, it states that students must score at least 80% on the vocabulary section for Formative Assessment 2 to be unlocked. Slide 27 indicates that Formative Assessment 2 is Step 4 in the Concept Mastery process.

- Materials include a Summit K12 Pacing Materials resource that outlines a section on assessments with suggestions for administration. The Assessments section states, “...Each district, school, and classroom has different assessment requirements, so our materials are built to provide flexibility to meet these needs. Each TEKS includes two online assessments, which may be given at any time during the unit.” Materials are designed to be flexible and easily incorporated into a district's scope and sequence and do not explicitly dictate when and how an assessment should be administered.
- The materials provide some guidance for teachers to consistently and accurately administer assessment tools. The Assessment Bank information on item types to support teacher understanding of scoring procedures within the program. The document includes slides with step-by-step arrows and images that show educators how to start the assessment tool. Even though the materials include general guidance on activating the assessment, the materials do not provide specific guidance to ensure consistent and accurate administration of the assessment tools. They lack support for the methods of administering the assessments and do not offer guidance on how to collect consistent and purposeful data.
- Materials include information about reports. For example, the materials state the types of reports in the program: Concept Boosters, Vocabulary boosters, Process Vocabulary, Usage Reports, etc. Reports are available by grade level in the top right of each course in which students are enrolled. While these reports provide data after students have completed an assessment, they do not provide guidance for consistent and accurate administration of the assessment tools.
- In addition to online assessments, each student activity is accompanied by a teacher guide, rubric, or answer key that helps teachers understand how to administer and grade the activity. These provide opportunities for assessment of student learning and concept mastery outside of traditional tests. Another example is the Phenomenon Sensemaking Guide. Students make sense of the phenomenon as they build an understanding of the science concepts, then create a final model and defend their explanations using a CER. Teachers use the CER rubric to score their writing.
- The materials include some information that supports the teacher's understanding of assessment tools and scoring procedures. In the Dynamic Teacher’s Guide, under Concept Mastery, teachers can find a slide presentation on locating the assessments for each lesson. For example, at the end of each quiz, an answer key is provided on the review page. Teachers can click on question 10 of an assessment and click "Finish Attempt...," then "Submit all and finish" to view the answers. Students see this screen once they have completed a quiz. Additionally, teachers can view a student's performance, along with the correct answers, on any online assessment. However, the materials do not provide detailed information to support the teacher’s understanding of scoring procedures within the program.

Summit K12 Dynamic 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 offer accommodations for assessments so that students with disabilities can demonstrate mastery of learning goals. The teacher guidance document for Accommodations, Accessibility, and Designated supports explains the accommodations found on assessments. Slide 3 lists the Designated supports as calculation aids - digital calculator, content and language supports, individualized structured reminders, spelling assistance, and supplemental aids. Slides 12-14 show how a student would access the digital calculator and how to adjust the calculator's display for reverse contrast or braille mode. Slides 15-18 show what text-to-speech and content and language supports look like from the student's view and how a teacher would turn those features on for students who need those specific supports. A guiding document may be utilized by teachers to accommodate students. Teachers may choose to reference provided materials and download and print the reference chart and/or any of the graphic organizers provided within the course materials for use as supplemental aids during assessments.
- Materials include guidance to offer accommodations for assessment tools that allow students to demonstrate mastery of knowledge and skills aligned with learning goals. For example, the Teacher's Guide section, Teaching and Learning, has a PowerPoint titled Differentiation and Acceleration; this shows the teacher how to assign available accommodations (digital calculator, content and language support, and text-to-speech).

Summit K12 Dynamic 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 include guidance, scaffolds, supports, and extensions that maximize student learning potential.

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

- Materials provide recommended targeted instruction and activities to scaffold learning for students who still need to achieve mastery. For example, in reporting category one, Matter and Energy, 5th-grade lessons are offered to help students strengthen foundational knowledge. Lesson 5.5B, Mixtures Maintain Physical Properties, and lesson 5.6C, Solutions, focus on demonstrating and explaining that some mixtures maintain physical properties of their substances, such as iron filings and sand or sand and water, and comparing the properties of substances before and after they are combined into a solution and demonstrating that matter is conserved in solutions. These concepts lay the foundation found in lesson 6.6B, Pure Substances, Solutions, and Mixtures, where students investigate the physical properties of matter to distinguish between pure substances, homogeneous mixtures (solutions), and heterogeneous mixtures.
- The Concept Mastery section has two formative assessments for every TEKS in a unit. Teachers should provide the first formative assessment after completing the initial instruction; this allows the teacher to check for mastery and then target instructional activities for students who did not master the topic. Materials ensure teachers can target instruction to develop precursor skills in two ways. First, the Content Mastery section has two formative assessments, a TEKS video, and a vocabulary activity for the supporting standards from a primary grade. For example, 5.9A, 5.10A, 5.10B1, and 5.11A are present in Earth and Space. Secondly, if students need even further instruction, complete Lesson Guides for these supporting TEKS are found within each unit. These lessons provide complete instructional activities that a teacher may use for whole groups, small groups, tutorials, etc., for students at any level.

- Materials provide recommended targeted instruction and activities to scaffold learning for students who still need to achieve mastery. For example, in reporting category one for 6th grade, there are four Lesson Guide opportunities for teachers to use that scaffold into the current content. Before presenting a lesson on Pure Substance, Solutions, and Mixtures (6.6B), there are scaffolded lessons on Mixtures Maintain Physical Properties (5.6B) and another lesson on Solutions (5.6C) that teachers can use as targeted instruction for those students who have not reached mastery on the 5th-grade content before learning grade-level content.

Materials provide enrichment activities for all levels of learners.

- Materials provide enrichment activities for all levels of learners. Materials provide extension opportunities within lessons. For example, in lesson 6.10C, Metamorphic, Igneous, and Sedimentary Rocks, students can extend their understanding by creating a comic strip, storyboard, slideshow, poem, or prose that tells the story of a sedimentary, metamorphic, or igneous rock's journey through the rock cycle. The stories name and illustrate the processes of changing rocks, the rock types, and the outcome. Another example of an enrichment activity is in lesson 6.13A, Cell Theory. Students can further their understanding by researching how cell theory discoveries have contributed to advances in healthcare and creating a presentation to showcase their findings. The materials include science videos and simulations broken down by TEKS. There are videos for grade-level TEKS, such as 6.10A, and supporting TEKS, such as 5.10A.
- The materials include multiple simulations that can be used for enrichment. For example, there are 3 PhET simulations for 6.7A. The Teacher's Guide embeds suggestions for engaging enrichment activities in each lesson. The Lesson Guide for every TEKS is an Apply and Extend section. In this section, teachers can use it for gifted and talented students or for those students who have already mastered the content.
- The Apply and Extend section contains additional activities ranging from projects and lab design challenges to engineering projects that all further explore the science concepts covered in that lesson. For example, in the Lesson Guide for Newton's Third Law, 6.7C, teachers have four choices of Apply and Extend activities - the Study Guide, a Force Pairs Worksheet, Student-Created Demonstration Graphic Organizers, and Action-Reaction Models.

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

- Materials provide scaffolds and guidance for just-in-time learning acceleration for all students. The lessons include recommendations for just-in-time scaffolds to develop productive perseverance in learning. For example, in the teacher notes for the engagement portion of lesson 6.8A Gravitational, Elastic, and Chemical Potential Energies, teachers can use the question prompts provided to keep students focused and thinking about the concepts demonstrated. For example, "Can a small battery, such as the one used in this demonstration, successfully power a larger object, like an electric car? If so, how? If not, why not?"
- Lessons provide support and resources for students ready to accelerate their learning. The materials contain several components called Dynamic Science Student Engagement. The components include TEKS videos and animations, interactive digital flashcards, digital avatars to track student progress, and student top 10 tables to compare their learning with the class, school, district, or state. Interactive learning activities, science labs, and engaging STEM career explorations exist.
- The materials provide general discussion questions to be used during an activity with all students. They prompt the teacher to monitor and ask students questions as the activity

progresses. The materials provide support and resources for students ready to accelerate their learning. The materials offer a variety of student activities that can be assigned based on the student's mastery of scientific knowledge and skills. For example, videos, simulations, eBooks, study guides, virtual field trips, and career exploration opportunities can all be assigned to any student as needed.

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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.

- Materials include a variety of developmentally appropriate instructional approaches to engage students in the mastery of the content. Materials engage students in the knowledge of the content through various developmentally appropriate instructional approaches. For example, lessons include classroom demonstrations. In lesson 6.7B, Balanced and Unbalanced Net Forces, the teacher demonstrates upward force strong enough to overcome the force of gravity with a tennis ball and hairdryer. For example, materials include opportunities for students to engage in collaborative or cooperative learning activities. In lesson 6.10A, Biosphere, Hydrosphere, Atmosphere, and Geosphere, students differentiate and list components for each Earth's systems. Students use picture cards to analyze images, identify what sphere each image represents, and create a fact sheet for each image. Students work in cooperative pairs to complete this activity.
- The materials include various developmentally appropriate instructional approaches to engage students. For example, most lessons include e-books, videos, and simulations to engage students. For 6.7C, Newton's Third Law of Motion, there's a video that is 6:51 minutes long and a PhET Simulation called the Pendulum Lab. The materials include various instructional

approaches, including demonstrations, lab investigations, independent, partner, group work, summarization, and graphic organizers. For example, the Science Lab Explorations document contains a list of 55 labs that include demonstrations, labs, and field investigations. The Graphic Organizers supplemental material has utilization access to 20 different graphic organizers.
- There is a variety of instructional approaches within the 5E lesson model. In the lesson, Density (6.6C), in the Engage section, there is a KWL chart for students to complete, which they will review in the Apply and Extend section later in the lesson. The lesson includes a Density Graphic Organizer, a Cola vs. Diet Cola Demonstrations, and a Density Lab.

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

- Materials support flexible grouping (e.g., whole group, small group, partners, one-on-one). Within the materials, there are opportunities in any given lesson that state whether they are whole groups, student groups for investigations, partner groupings, or independent work to support student grouping assistance. For example, in lesson 6.7C, Newton's Third Law of Motion, the beginning engagement activity is a whole group demonstration—next, a series of more demonstration activities where students observe the teacher and take notes. In one exercise, the teacher leads the demonstration, but the instructions allow students to work in whole groups, small groups of four, or in partners. The lesson concludes with independent student activities.
- Another example of flexible group support can be found in the Teacher's Guide. The teacher's instructions for laboratory investigations include instructions on what instruction should consist of in each group's materials. An example of this can be found in Rocks in the Rock Cycle Investigation Teacher Guide; this identifies the need for six samples of rock, a Rock Key, a hand lens, a 3-inch nail, a clear plastic cup, a dropper, and paper towels per group of students.
- The materials guide teachers on when to use specific grouping structures based on the needs of students. For example, the materials mention when lesson activities are whole groups, student groups, or partner work. The materials imply when students should work in groups, such as for a station lab or with partners for a reading activity. Activities and worksheets are provided that could be done independently, but they could also be done in partners or groups.

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

- Materials consistently support multiple types of practices such as model, collaborative, and independent. Several lessons contain teacher demonstrations where the teacher models appropriate laboratory practices. Lessons also include opportunities for students to collaborate with their peers through discussions, conducting research, or investigations. Students have the opportunity for independent practice with the evaluations at the end of each lesson when they partake in formative assessments and vocabulary practice.
- The materials provide multiple types of practices. For example, the Lesson Guide for 6.13B Basic Characteristics of Organisms indicates that students will work collaboratively during a Turn and Talk, work through several guided activities such as a Prokaryotes vs. Eukaryotes Venn Diagram, and potentially independently on the Study Guide. The materials provide teacher guidance and structures for effectively implementing multiple types of practice. A clear purpose or goal is given for each activity within a lesson guide. For example, the Symbiotic Relationship Graphic

Organizer in 6.12B states, “Students will create a graphic organizer by adding definitions and explanations of each relationship type and providing examples.”

- The e-book Matter in a Frozen Land comprehension strategy focuses on making inferences. Materials consistently support multiple types of practices and provide guidance and structures to achieve effective implementation. For example, in the lesson Forces Acting on Objects (6.7A), the teacher models in the Identifying Forces activity that students work collaboratively in Friction Investigation and independently in a Chain Reaction Machine.

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

- Materials represent a variety of communities in the images and information about people and places. For example, in the program website's Scientific and Engineering Practices Section, under the Investigate STEM careers category, real-life images of people in STEM careers represent people of various ethnicities, ages, and genders. For example, e-books in the differentiated science literacy section appropriately feature images primarily concerning scientific concepts. When an image contains a person or a place, a variety of each is displayed throughout e-books to represent diverse communities.
- Images reflect the diversity of school communities and match the content. Characteristics vary in images to include race and ethnicity, skin tone, gender identity and expression, age, disability status, body size and shape, and hair texture. For example, the e-book for Energy on the Move shows two students talking on page 6. One is an Asian female, and the other is an Indian male. The e-book “Seasons and the Sun” has a picture of a girl doing a track and field event on page 5, but the e-book “Surviving in the Rainforest” shows a boy studying flowers on page 6.
- Materials represent a diversity of communities in the images and information about people and places. For example, the videos include a variety of diversity in images, communities, people, and places in the videos provided. In the video about Sexual and Asexual Reproduction (7.13C), the assortment includes but is not limited to deer, hogs, butterflies, bees, penguins in the tundra, hydras in the ocean, horses, zucchini, bacteria, elephants, opossums, polar bears, potatoes, ferns, planaria, starfish, strawberries, chickens, cats, male and female humans, Asian people, African American people, Caucasian people, and Hispanic people.

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Indicator 7.3

Materials include listening, speaking, reading, and writing supports 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.	PM
2	Materials encourage strategic use of students' first language to linguistic, affective, cognitive, and academic development in English.	M

Partial Meets | Score 2/4

Partial Meets | Score 1/2

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

Materials include some 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.

- Materials include some guidance for linguistic accommodations (communicated, sequenced, and scaffolded) commensurate with various levels of English language proficiency as defined by the ELPS. The materials provide linguistic accommodations for beginner Emergent Bilingual (EB) students. Inside the Science Literacy and Vocabulary Mastery section is a link to Multilingual Newcomer Lessons on 13 different topics covering all four reporting categories. The Lesson Plan document for each lesson provides detailed instructions for using the Newcomer lesson. They include an Activity Overview that explains whether the activity should be done individually, with partners, or in small groups. They have Word-Learning strategies, pronunciation practice, instructions for using the worksheets, and how to use the blue-level e-book. The e-books are supposed to come in color-coded reading levels. While the materials provide separate lessons for beginner or newcomer students, they do not offer this support for intermediate, advanced, or advanced high students.
- The materials reference the administrative code for the ELPS used in a specific activity. For example, there is a set of Teacher Demonstrations in the lesson guide for 6.6E, Evidence of Chemical Change. ELPS 1. A.I, 1. A.II, 1. D.I, 2.C.III, 2.C.IV, 3. D.I, 3. E.I., 3.F.II, and 3.G.II are given to them. However, the guidance provided to the teacher does not consistently assist with accommodating activities for the various levels of learners. For example, there is a document called "ELPS Implementation Guide;" however, it does not provide information for all levels.

Specifically, in Expressing Ideas, ELPS 3.G.ii, the Suggested Activity section states, “For beginning students, brainstorming ideas for their teacher would be the final step. Advance students will discuss each idea to come up with one final solution.” In Expressing Opinions, ELPS 3.G.i, the Suggested Activity section states, “Beginners can use simple responses to many different subjects, while advance students can dialogue only a few subjects.” Consistent support for the various levels of English language proficiency is not included.

- Materials include some guidance for linguistic accommodations (communicated, sequenced, and scaffolded) commensurate with various levels of English language proficiency as defined by the ELPS. For example, there is a lesson guide in the Multilingual Newcomer Lesson section for category 4, Ecosystems. The teacher lesson plan provides a scaffolded lesson for ELLs with suggestions for activities, grouping, time, and ELPS alignment. There is an option to print multilingual versions of the worksheets and Vocabulary Boosters in 20 different languages. The teacher's lesson plan says, “Use the Word-Learning Strategies to introduce words from the Blue Level Student Book or e-book.” E-books for all levels of learners are not provided in the materials.
- In the Teacher Resource, materials include a Science Cognates list under the Science Literacy-Vocabulary Mastery section. For example, in the section Science Cognates, there is a category for SEPs: Matter and Energy; Force, Motion, and Energy; Earth and Space; and Organisms and Environments. Each category includes three sets that review pictures and language familiar to the category. The student can see and listen in Spanish, then see, hear, and speak (a record) in English. Materials state, “Spanish-English Science Cognates enable Emergent Bilingual Students and in particular 1st and 2nd Year Beginning level students to build confidence quickly.”

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

- Materials encourage strategic use of students’ first language as a means to linguistic, affective, cognitive, and academic development in English. For example, the Science Literacy/Vocabulary Mastery section contains a resource called Science Cognates/English-Espanol. Within this resource are sets of cognates practice grouped in the reporting categories of SEPs, Matter and Energy, Force, Motion, Energy, Earth and Space, and Organisms and Environments. Students practice saying the cognate in a Spanish phrase and then again in an English phrase. For example, there is a lesson plan in the Multilingual Newcomer Lesson section for category 4, Ecosystems. The teacher lesson plan says, “For home language support of the Basic Vocabulary, refer to the Foundations eBook table of contents to print multilingual versions of the worksheets and to the Vocabulary Boosters Multilingual Edition for Newcomer vocabulary practice in 20 different languages.” There are links to the word list, flashcards, and study guides with an answer key.
- In the Science Literacy/Vocabulary Mastery section is a resource called Multilingual Newcomer Lessons. Here, teachers can follow the ConceptLinks® Science Foundations lessons. These lessons support newcomer students, beginning-level English learners, and students with limited English proficiency. The program helps students develop reading, writing, speaking, listening, and thinking skills. The foundation skill lessons introduce and teach basic vocabulary and word-learning strategies and focus on building literacy, language, and concept comprehension. The pacing guide outlines an example of how the foundation lessons for each topic are organized into five or ten days of instruction at a recommended 20 minutes per day.
- The materials include homework in languages other than English. In the Teacher's Guide for any of the Multilingual Newcomer Lessons, there is a word list and study guide available in Spanish,

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Arabic, Burmese, Simplified Chinese, Traditional Chinese, Hmong, Korean, Nepali, Persian-Farsi, Portuguese, Somali, and Vietnamese. The Teacher's Resources includes a document that explains how to use the Science Cognates activity with students. This document describes the purpose, examples, and how using cognates will benefit students on page 2. Pages 3-5 explain how to access the Science Cognates within the Science Literacy Vocabulary Mastery Materials. Page 6 lists the cognates for all four reporting categories for 6th-8th grade. The remaining pages show how the cognates activity looks for students.

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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.

- Materials provide information to share with students and caregivers about the design of the program. For example, information is available to help students use the online course components in the “Student-Getting Started” tab under “Additional Resources” in the Teacher's Guide. This 32-page slide deck walks students through the design of the online program, critical features of the program, where to find specific features, and how to access all program components. The information may also be provided to caregivers to help them learn how to log in from home.
- The materials provide information to share with caregivers about the design of the program. The materials offer a 3-page letter for parents and caregivers that is available in both English and Spanish. Page 1 of the letter is a general explanation of the course. Page 2 explains how to access the materials from home. Page 3 demonstrates what students will see upon logging in and explains the four major modules students will likely work in from home.
- The course materials include information about the lessons' instructional design and course components. These documents provide insight into the program's design and may be shared with students and caregivers. Teachers can access and share the documents describing the 5E model under the “Course Design” section of the Teacher's Guide. Materials provide information to be shared with students and caregivers about the design of the program. For example, overviews of the Science and Engineering Process skills, Recurring Themes, and Concepts, including Phenomena, can be shared with students and caregivers.

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

- Materials provide resources and strategies for caregivers to help reinforce student learning and development. The program includes an English/Spanish program overview letter that can be sent home via print or online through e-mail or LMS. The letter briefly explains how to access the program and how to navigate to key features. Extension activities that involve caregivers include suggestions on how the caregiver can support the student's needs. The materials include Home-School Connection letters for each lesson. Each letter contains critical points of the lesson, conversation starters, at-home activities to reinforce or extend knowledge, essential vocabulary, and a picture talk.
- The materials provide website access with activities for reinforcing students' learning of scientific vocabulary. The online accessible materials contain a module called Concept Mastery. This module has a vocabulary activity for every 6th-grade TEKS and 5th-grade supporting TEKS. Additionally, inside the Science Literacy/Vocabulary Mastery module are Vocabulary Mastery practice lessons. The materials provide at-home activities for caregivers to help reinforce student learning and development. Inside the teacher resources is a "Home to School Connection" document. This resource contains one-page information sheets for each TEKS that can be sent to caregivers. These sheets help caregivers understand what their child is learning in the classroom. Each sheet contains the following sections - Key Points, Conversations (questions to start conversations with students at home), Activities (at-home activities to reinforce concepts), Vocabulary, and Picture Talk (a picture with a question). It should be noted that these Home to School Connection sheets are only available in English.
- There is a "Home-School Connection" for each TEKS. This one-pager includes vocabulary, a graphic, key points, activities, and questions to guide caregivers. Materials provide information to be shared with caregivers for how they can help reinforce student learning and development. For example, the program is web-based, so students and parents can access it at home or anywhere with a connection. Students and caregivers (as co-viewers) have access to vocabulary flashcards and all resources available online.

Materials include information to guide teacher communications with caregivers.

- The materials include resources or suggestions for communicating with families representing diverse languages and cultures. For example, materials provide Home-School Connection letters for each TEKS to communicate with caregivers and to help them reinforce learning and serve as partners. These letters include key points, conversation starters, activities, vocabulary, and a "picture talk" discussion.
- Materials include a "Parent/Guardian Letter" in the "Summit K12 Teacher's Guide" that provides information to guide teacher communications with caregivers. The instructions state, "The attached letter is an example of one that you may send home to the parents or caregivers of your students to introduce them to the [program] K12 Science resources. We suggest sending the letter below, as well as instructions for how to access the program from home, through the district's LMS or portal." In addition, the "Parent/Guardian Letter" provides information for teachers to share with caregivers, like "This online program is accessible from home and includes lesson videos, digital flashcards, study guides, animations, and assessments." Furthermore, the letter explains to caregivers how "students will most likely be assigned work in one of the following modules:
    - Science Videos and Simulations – Lesson videos for all of the TEKS

    - Concept Mastery – Lessons, assessments, vocabulary, and practice to help students master each TEKS during the year
    - Science Literacy and Vocabulary Mastery – A TEKS-based nonfiction literacy and vocabulary resource to help students master Science vocabulary and concepts
    - Scientific and Engineering Practices – Includes Science labs, field investigation videos, more advanced vocabulary flashcards, Science process skill lessons, and other inquiry-focused resources."
- The materials provide progress monitoring and reports based on student achievement within the Concept Mastery section of the course. Teachers can use these reports during parent conferences or send them home to inform families of their student's progress. Information about these reports is found in the Teacher's Guide. For example, teachers can download and print individual student reports for Concept Boosters and Vocabulary Boosters. To access individual student reports, the teacher must click on the student's name from the drop-down list on the main report page. The Concept Mastery report gives the score the student made for each activity per TEKS. The Vocabulary Mastery report shows the student's score on the vocabulary mastery activity and its organization design by TEKS. The materials guide the teacher on how to access the "Reports and Dashboards." There is also a link to a help center if teachers are struggling to locate the information. The materials guide the teacher on how to access the "Reports and Dashboards." Materials include information to guide teacher communications with caregivers. The materials include reports that can be sent home.

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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.	PM

Partial Meets | Score 1/2

The materials partially meet the criteria for this indicator. Materials include year-long plans with some 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 into the course materials. Materials provide teacher guidance for facilitating student-made connections across core concepts, scientific and engineering practices, and recurring themes and concepts. Materials provide some 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.

- Scope and Sequence and Pacing Guides are within the Teacher Resources. These guides provide a Year at a Glance document, which indicates the number of days that are allotted for each reporting category and the number of Texas Essential Knowledge and Skills covered in that time frame. The resource gives the scope and sequence for the entire year. This further breaks the reporting categories into units, TEKS covers within a section, and the time allotted for each TEKS and unit. The Pacing Guide includes decomposing the reporting categories into the TEKS, briefly describing the concepts within the TEKS, and providing an estimated amount of time needed to cover the TEKS adequately. The materials include year-long plans aligned with grade-level TEKS. For example, a year-long scope and sequence is found in the Teacher's Guide, included in the Teacher Resources section. Furthermore, the materials list all grade-level TEKS organized into units of study with suggested pacing for each TEKS.
- Inside the unit for each reporting category, on page 3, there is a TEKS scaffold document that shows the vertical alignment from 5th to 6th grade. Lessons are provided for each supporting TEKS to allow for reteaching and review. Inside the Lesson Guide for a specific TEKS, the vertical alignment from the 6th-grade TEKS to related 7th- or 8th-grade TEKS is shown in the Teach and Discuss section.

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

- The materials provide teacher guidance for the concepts, RTCs, and SEPs. The Phenomenon Teacher Guide has specific questions in the Facilitating Sensemaking section that make the connections to RTCs and are clearly labeled as such. For example, in 6.9A Phenomenon Teacher Guide, Exploring the Midnight Sun, the Facilitating Sensemaking tells the teacher to instruct students to record their initial observations and questions in part 1 of their Phenomena Sensemaking Guide. Students refer to the Scientific Thinking Guide to help them extend their observations and thinking and make broader connections. To drive student thinking, the teacher questions include, RTC 6.5B - What do you already know about what causes day and night? What did you expect would happen when day turned to night? How was your prediction similar to or different from what actually happened? and from RTC 6.5G - What factor(s) or condition(s) create the day and night schedule we are familiar with? What do you already know about the cycles and changes involved with the Sun's apparent movement across the sky?
- The materials guide teachers in understanding how activities and experiences connect concepts and SEPs. For example, the materials include a 6th-grade TEKS-SEPs-RTCs Crosswalk, providing teachers with a glance at the connections between the TEKS, Science and Engineering Practices, and Recurring Themes and Concepts. For example, in category 4, Organisms and Environments, students collaborate on cleaning a messy room. Students connect the need to categorize items in their room to how organisms are classified. All guidance was provided to teachers, only listing the SEPs and RTCs. While Science and Engineering Practices and Recurring Themes and Concepts are embedded within each lesson, no specific resources could be found for assisting teachers with guiding students to make connections across the SEPs or RTCs throughout the year. For example, in grade six, the teacher instructs students to turn the "Force Values" section to "Hidden." Then, allow students to change the Normal vs. Applied Force mass and distance of the two objects and tell them to notice what happens to the arrows. After a few minutes of letting students explore the PhET, materials were provided for the teacher to ask, "What happened when you changed the mass of the objects?" (Students may say the size of the arrows decreased as the mass decreased, and the size of the arrows increased as the group grew.) Then ask, "What happened to the size of the arrows when the distance between the two objects changed?"

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

- Materials include some intentional practice and spiraling of previously taught knowledge and skills from earlier lessons in the same reporting category. Materials connect vertically to the previous grade and next grade alignment. Materials do not include regular review lessons where no new science skills are explicitly taught but previously taught science skills are reviewed and practiced. The Lesson Guides and Instructional Resources include scaffolded lessons that offer related concepts from previous grade levels. For example, in Reporting Category 4, Organisms and Environments, a 5th-grade TEKS lesson is available on Ecosystems. Lesson plans with Study Guides are included for scaffolded concepts from 5th grade. These lessons provide review and practice with those supporting TEKS to ensure student success with foundational concepts and skills.

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- Study Guides are provided for each unit and allow students to review concepts taught within one specific lesson. Activities are provided during the learning of the new TEKS, allowing students to offer what they have just learned, such as by working with a card sort or creating a diagram of essential concepts/information. It says that "the Scope and Sequence was designed to be flexible, with time built in for concept and spiral review." However, no materials were provided to review or spiral content over the year. Each activity and Study Guide focused solely on the new concepts taught within that lesson. There are connections to knowledge in previous grades. For example, in 5th grade, students observed and described how various organisms survive by interacting with biotic and abiotic factors in a healthy ecosystem (5.12A).

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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

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 the 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 standard 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.

- Materials include classroom implementation support for teachers and administrators. For example, teacher guidance is given for the "Modeling Particle (Atoms and Molecules) Movement Activity" in the 6.6A, Comparing Solids, Liquids, and Gases, Lesson Guide. Teachers use questions and movement to enhance students' learning of the differences between particle movement of solids, liquids, and gasses. Materials provide embedded technology to support and improve student learning. Inside the Science Literacy/Vocabulary Mastery section are three areas: Multilingual Newcomer Lessons, Differentiated Science Literacy, and Science Cognates English/Spanish. Inside the Multilingual Newcomer Lesson area is a Science Foundations Newcomer Lesson Guide. Inside are Lesson Guides for each curriculum unit, such as Light and Sound, Weather, or Oceans. The Lesson Guides contain Pacing Guides, Lesson Materials, and resources in multiple languages. The Differentiated Science Literacy area has a Science Literacy

Teacher's Guide. Inside the guide is a list table containing the science TEKS, a comprehension strategy, guided reading, a study guide, and an answer key. The Science Cognates area may be accessed in the instructional guide through the Dynamic Science Teacher's Guide by clicking on the Science Cognates link.

- The Dynamic Science Teacher's Guide contains links explaining each curriculum product. For example, clicking on the link for Videos opens a new tab containing all the information on the Videos and Simulations in the curriculum. Information includes how to access the videos and simulations in multiple ways, a sample data table from a reporting category listing the videos by TEKS and topic, and screenshots of how the videos look. They even include helpful hints such as using closed captioning or adjusting the playing speed of the video. The same level of detailed information is then presented for the simulations. To expound, There are various recommendations for using materials, research, and enrichment activities to support student learning. In addition, there is a list of scaffolded questions and answers. It also includes enrichment activities and an extension section.

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

- Grade 6 materials provide standard correlations within the content area of Science. Specific TEKS can be found in the Scope and Sequence and Pacing Guides as well as in each lesson. The standard statement is at the top of each lesson. For example, in Category 3, Earth and Space, a lesson titled “Layers of Earth,” the lesson header notes the lesson correlates with 6.10B and relates to the student's expectation of model and describing the layers of Earth, including the inner core, outer core, mantle, and crust. Teachers can access the specific TEKS wording in an additional document under the TEA Resources located in the Teacher’s Guide.
- Each Lesson Guide contains the TEKS for vertical alignment as well as a list of all English Language Proficiency Standards, Science and Engineering Practices, and Recurring Themes and Concepts. For example, in the Lesson Guide for 6.7C Newton's Third Law of Motion, page 2 shows the vertical alignment to 5th grade and 7th grade TEKS. Pages 5-6 list each of the ELPS, SEPs, and RTCs for the 6.7C lesson. Materials for grade 6 do not include a “Connect to…” reference to engage students in cross-content standards; however, materials sometimes reference a literacy activity to support cross-content standards. Specifically, in the Lesson Guide for 6.8B, Energy Transfer & Transformations, the gear icon lists an “Energy Transfers and Transformations in Food Webs Literacy Activity.” Students will read an article about how energy is transferred and transformed in food webs and through photosynthesis. Then, students will complete individual and pair activities using what they have learned. The strategy focused on in the article is Determining Importance. Students read and ask themselves about what the most important ideas are, focusing on clues like titles, headings, photographs, charts, diagrams, etc. At the end of the reading, students answer questions in their journals, using what they have learned from the article. Lesson guides do not consistently include literary connections or other content connections.
- In the Differentiated Science Literacy section of the Science Literacy Vocabulary Master, the Science Literacy Teacher’s Guides include guided reading passages with objects for language, literacy, and content. For example, the resource lists the title of the passages, the comprehension strategy, and the eBook. In the eBook Matter in a Frozen Land, the comprehension strategy is to Make Inferences. The Science Literacy Teacher’s Guide states the literacy connection as, “Read and analyze nonfiction texts. Interpret charts and diagrams. Make inferences to deepen understanding.” The science content objective states, “Understand that

matter is anything that takes up space and has mass. Understand that matter can change state. Understand that all matter is made of atoms, which can bond together to form molecules." While there are reading passages within the curriculum, there is no explicit correlation of cross-curricular concepts from other content subjects listed. For example, there is no direct mention of other content connections or concepts, i.e., math or history, within the curriculum.

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

- Materials include a comprehensive list of all equipment and supplies, including perishables, needed to support instructional activities. The materials contain a list of equipment and supplies necessary for a particular lesson, such as a lesson on 6.6B, Pure Substances, Solutions, and Mixtures, for teachers to conduct the engagement piece, investigative lab, and extension.
- The Teacher's Guide page contains a comprehensive list of all equipment and supplies needed for the entire program. Inside each Lesson Guide is a comprehensive materials list that contains all the materials needed for each activity within the lesson. For example, in the 6.8A Gravitational, Elastic, and Chemical Potential Energy Lesson Guide, the Materials List is linked on the first page in the Resource section. Clicking on the link opens a two-page document that lists the materials needed for the engagement, three Teach and Discuss, and two Apply and Extend activities.
- On the Dynamic Science Teacher Resources page, the Science and Engineering Practices section listed Material Lists and Inquiry Kits. The "6th Grade Dynamic Science Master Lab Materials List'' includes a bulleted list of all equipment and supplies (i.e. yardstick, tray (aluminum or plastic), toothpicks, radiometer, microscope (per group or pair)) needed to support lab investigations. Purchasing options include a pre-packaged materials list and a material kit refill.

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

- Materials include guidance for safety practices, including the grade-appropriate use of safety equipment during investigations. A Skills Companion for 6.1C, Science Safety, and Tools is inside the Science and Engineering. Clicking on the link to the Skills Companion opens sixteen PowerPoint slides that comprehensively review science lab equipment, the proper usage of certain items like fire extinguishers and showers (slides 3 and 4), as well as safety practices for a wide variety of lab situations (slides 9 -12) and field investigations (slide 14). The Lesson Guides indicate any safety considerations or equipment needed for an activity.
- Grade-appropriate use of safety equipment is included where necessary. For example, in the lesson on 6.6E, Evidence of a Chemical Change, the teacher uses appropriate safety equipment such as goggles, an apron, and gloves. The student stations set-up list contains the Lab Safety statement: "Students should wear goggles, gloves, and aprons while participating in these stations." The materials located under Teacher Resources provide a Science Safety Contract that students complete under the guidance of their parents.

Summit K12 Dynamic 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.

- Summit K12 has developed an optional year-long scope and sequence for schools and districts who wish to follow a set lesson progression that ensures covering all TEKS within one school year. Within this framework, all grade-level TEKS organize into units of study with suggested time allotments for each TEKS. Teachers and administrators should adjust the instructional timeline according to student data and classroom needs. Materials provide a comprehensive timeline and framework based on state standards and serve as an optional resource that teachers and administrators may use in addition to or in support of instruction. Materials support scheduling considerations and include guidance and recommendations on required time for lessons and activities. The materials contain a Pacing Guide with suggested days needed to teach the content in each reporting category and each TEKS. For example, on page 3 of the scope and sequence, a timeline is given of the approximate days to teach each of the four reporting categories: Matter and Energy 5 TEKS in 35 days; Force, Motion, and Energy 6 TEKS in 42 days; Earth and Space 7 TEKS in 47 days; and Organisms and Environments 6 TEKS in 36 days.
- Another example is the suggested time frame for the components of a lesson. For example, on page 17 of the scope and sequence, a lesson on 6.7B, Balanced and Unbalanced Net Forces, the Apply and Extend portion of the concept is further broken down into subcomponents with suggested time frames for completion: Study Guide (30 minutes), Real-Life Diagram Analysis: Group Project (2 days), Net Force Simulation (1 day), and Engineering Connections: Marble Madness (2 days).
- The pacing, scope, and sequence allow teachers to adjust lessons based on their needs. For example, on page 3 of the Summit K12 Pacing Materials, 6th Grade Science says, "Only 160 days have been planned out of the 180 school days, though this course includes more than enough

material to cover the entire 180 days of instruction; this was intended to account for the beginning of year logistics, STAAR review, district and state testing, field trips, or any other interruptions to the daily cycle of instruction."

- The Pacing Guide guides on the recommended time for each activity within a unit. For example, on page 14 of the Summit K12 Pacing Materials, 6th Grade Science, it breaks down the activities for 6.6E, Evidence of a Chemical Change, by the amount of time suggested for a specific activity. It suggests 2 days for Chemical Changes Stations but only 15 minutes for Vocabulary Boosters.

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

- Materials guide strategic implementation without disrupting the sequence of content and leaving flex time for testing and remediation/extension. The instructional materials provided to the teacher indicate ways that teachers can adjust to meet the needs of the students without disrupting the developmental progression. The Pacing Guide provided 160 days of instruction instead of 180 days. Within a unit, the teacher will find scaffolded lessons from previously taught TEKS in lower grades and extension activities. Previously taught TEKS are reviewed within the natural progression. For example, the Force, Motion, and Energy Units provide scaffolded lessons for 5.7A, B, and 5.8A, B, and C. Because 20 days are left open for the teacher to use at their discretion, they have time to include any scaffolded units their students need.
- The materials purposely group modules with similar recurring themes and ideas, making it easier for students to connect scientific knowledge. For example, page 8 of the Pacing Guide indicates that the units were created around the Reporting Categories. This places all of the TEKS with similar and connected concepts together. Reporting Category 1 has 6.6 A, B, C, D, and E, which are TEKS over matter and energy. Categories 6.7A, B, B, C and 6.8A, B, and C are in a different unit because they are on Force, Motion, and Energy.
- The instructional materials provided to the teacher indicate ways that the lessons can be adjusted to meet the needs of the students without disrupting the developmental progression. The Pacing Guide provided 160 days of instruction instead of 180 days. Within a unit, the teacher will find scaffolded lessons from previously taught TEKS in lower grades and extension activities. Previously taught TEKS are reviewed within the natural progression. For example, the Force, Motion, and Energy Units provide scaffolded lessons for 5.7A, B, and 5.8A, B, and C. Because 20 days are left open for the teacher to use at their discretion, they have time to include any scaffolded units their students need.

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

- Materials designated for the course are flexible and can be completed in one school year. For example, page 4 of the scope and sequence states that teachers and administrators should adjust the instructional timeline according to student data and classroom needs.
- On page 3 of the Pacing Materials, there is a Year at a Glance data table. This data shows that 160 days of instructional material have been allotted to complete the Texas Essential Knowledge and Skills for grade 6; this was intended to account for beginning-of-year logistics, STAAR review, district and state testing, field trips, or any other interruptions to the daily instruction cycle. Pacing should be adjusted according to student assessment data and district instructional priorities. Page 6 provides a complete scope and sequence, breaking the year into nine units. The TEKS for all nine units are listed to show that all required TEKS will be completed within the year.

- The materials are also designed to be flexible. Page 7 says that the Pacing Guide "can be adapted for teaching the Texas Essential Knowledge and Skills TEKS in any preferred order or according to a district-provided scope and sequence. The Pacing Guide is arranged by reporting category and includes suggested instructional time for each TEKS, but the actual order of instruction is flexible and should be adjusted according to student needs and district priorities." Thus the materials provide the flexibility needed by teachers and districts.

Summit K12 Dynamic 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 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 digital materials include appropriate white space and an overall design that does not distract from student learning. For example, student materials are appropriately designed to support student learning. For example, the student study guides that accompany each lesson are arranged in a structured layout that remains the same so students become familiar with and know what to expect as they work within them. Students can easily find the content vocabulary relevant to the current lesson at the beginning of the study guide. The middle of the study guide goes along with a hands-on activity of the corresponding lesson. Usually, this section features some sort of graphic. The graphics displayed are recognized and labeled. Also, the activity sections frequently feature a table where students record data from whatever investigation they are conducting. Plenty of space is given in the tables for students to write or draw their data. The study guides conclude with reflection questions. Students are given several lines to answer, which is beneficial when they need to use evidence to support their claims.
- Teacher guidance materials are appropriately designed with precise, designated places for important information. Teacher's Guides are designed so that teachers can locate crucial information quickly for planning and implementation. Every lesson has a guide that follows the same format. First, the lesson header contains the title and the related TEKS code. Then, the student standard is written in an objective statement beginning with "students will." The core vocabulary is in a shaded box at the top of the first page. Under this, in another shaded box, is a list of the resources needed for the lesson. The following section, "Engage," is the lesson opener, where the teacher engages the students in the topic and establishes relevance. The "Teach and Discuss" section contains a vertical alignment statement, the key concepts with expanded explanations, activity explanations, links, and misconceptions. The following section, "Apply and Extend," contains teacher directions for activities such as completing the study guide

and more hands-on enrichment activities. The final section, “Evaluate,” reminds the teacher of the assessment process contained in the program for students to access online.

- The digital materials include appropriate white space and an overall design that does not distract from student learning. For example, e-books are well formatted with clear and prominent titles, headings, and subheadings. There is an appropriate amount of white space surrounding images in the e-books. The e-books contain tools students can use to annotate text, including a highlighter and sticky notes.
- The teacher guidance materials are appropriately designed with precise, designated places for important information. The lesson guide is designed so teachers can locate information quickly for planning and implementation. Each lesson guide begins with the TEKS written out, a list of core vocabulary covered within the TEKS, and a list of resources. Then, the lesson guide moves through the same four sections - Engage, Teach and Discuss, Apply and Extend, and Evaluate. Each section contains the activities and information the teacher needs, including the links to documents and a list of the SEPs, RTCs, and ELPS utilized in each activity. The lesson guides conclude with the SEPs, RTCs, and ELPS written out to assist with teacher understanding and planning.
- Materials include an appropriate amount of white space and a design that supports and does not distract from student learning. For example, each TEKS lesson guide provides a clear, organized, logical main subject title. When students use the read-aloud option, the word being said is highlighted so that students can read along with the voice.
- Materials include an appropriate amount of white space and a design that supports and does not distract from student learning. For example, Teacher's Guides provide links to ancillary material. There are color-coded callout boxes for activities and different colored fonts for important information.

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

- The materials embed age-appropriate pictures and graphics that support student learning and engagement without being visually distracting. For example, each lesson has a corresponding e-poster with illustrations of key concepts and simple, clear explanations that are grade-level appropriate and not overly wordy. The graphics stay focused on the scientific concepts and do not unnecessarily place pictures of possible distractions. The e-posters also contain the key vocabulary of the lesson. The e-posters are also available in an interactive version where the teacher can enlarge the graphics for a better view.
- Another example includes the e-books included in the program. The short books contain concise, focused information on the featured student standard. The graphics are large, colorful, and highly related to the concepts and ideas of the text. The e-books follow the same format. After the title page, the introductory page displays the critical vocabulary in the book's text. Also, this page helps students with reading strategies and lists a purpose for reading. The body of the book is a few pages of information with graphics; the number of pages depends on the complexity of the concept. The penultimate page is where the student engages in a reinforcement of the material read as well as fundamental reading strategies.
- The materials embed age-appropriate pictures and graphics that support student learning and engagement without being visually distracting. The materials include vocabulary cards with clear and authentic images and graphics to define and help the new words students are learning. The vocabulary cards are located in the Science Literacy and Vocabulary Mastery module. For

example, the images and graphics stay solely focused on the topic the vocabulary card is supposed to represent.

- The materials include age-appropriate pictures and graphics to support student learning and engagement. For example, an image of an atom in the vocabulary cards does not contain labels for the parts of an atom, as students in 6th grade are not expected to know atomic structure.
- Materials embed age-appropriate pictures and graphics that support student learning and engagement without being visually distracting. For example, the Concept Mastery section has a vocabulary section that provides graphics with accurate labels with an age-appropriate amount of detail.
- Materials embed age-appropriate pictures and graphics that support student learning and engagement without being visually distracting. For example, within the e-posters and e-books, numerous illustrations contain accurate labels with age-appropriate detail.

Materials include digital components that are free of technical errors.

- The materials include digital components free of technical errors. For example, the vocabulary mastery cards are free from errors in the graphics and definitions of the terms. The cards are also free from spelling and grammatical errors.
- Another example of the materials being free from technical errors includes the Science Videos. The videos are relevant to their corresponding lessons and contain correct information in both visual and text displays.
- The materials include digital components free of technical errors. The materials have science videos in the Science Videos and Simulations module. The videos for each TEKS are free of technical errors.
- The materials include digital components free of technical errors. The materials contain e-books for each TEKS. The e-books are located in the Science Literacy and Vocabulary Mastery module in the Differentiated Science Literacy section. The e-books are free of technical errors.
- Materials include digital components that are free of technical errors. For example, lesson guides for each TEKS are free of spelling, grammar, and punctuation errors. The teach and discuss sections are free of inaccurate content.
- Materials include digital components that are free of technical errors. For example, answer keys are free of spelling, grammar, and punctuation errors. They are free of wrong answers.

Summit K12 Dynamic 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.	No
4	Materials integrate digital technology that is compatible with a variety of learning management systems.	Yes

Not Scored

Materials are somewhat 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 some 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.

- The materials integrate digital technology and tools supporting student learning and engagement. For example, digital technology and tools enhance student learning through such features as learning games, interactives, simulations, and online assessments. The materials include TEKS videos and animations, interactive digital flashcards, digital avatars to track student progress, student top 10 tables to compete with class, school, district, or state, and engaging STEM career explorations. The embedded technology within materials supports the print and does not replace it. Students use the digital technology available and printed material, such as the study guide and e-books.
- The materials include e-books. The e-books contain embedded tools such as a pen, sticky note, highlighter, and zoom function. These tools are accessed on the left side of the screen while an e-book is open.
- The materials include science videos for each TEKS, both on and below grade levels, supporting TEKS. For example, the Science Videos module for Earth and Space contains seven videos for 6th-grade TEKS and four for 5th-grade TEKS.
- The materials provide online Formative Assessments that allow students to highlight and take notes; it also offers Text-to-Speech that the teacher can assign. They also provide a variety of Simulations available by category. 6th grade has 22 simulations.

Summit K12 Dynamic Science Grade 6

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 integrate digital technology in ways that support student engagement with science and engineering practices, recurring themes and concepts, and grade-level content. Materials provide interactive simulations and models for students to explore scientific and engineering practices in a virtual environment. Students have access to PhET Simulations in many lessons throughout the course.
- The materials include virtual simulations where students receive information on various topics. The Science Videos and Simulations module has a section specifically for simulations. This section contains simulations for all four reporting categories, a total of 22 simulations.
- The materials allow students to obtain information using digital tools. The Concept Mastery module includes a TEKS video for each TEKS on grade level and supporting TEKS from lower grades. For example, the Force, Motion, and Energy section contains six videos for 6th-grade TEKS and five for 5th-grade TEKS.
- Materials provide graphic organizer templates are available and suggested in different assignments. These can be opened with Kami, allowing highlighting, text boxes, drawings, and shapes to be added. Teachers can download and save materials to Google Drive or OneDrive. Teachers may use graphic organizers that can be used with content, SEPs, and RTCs. Materials integrate digital technology in ways that support student engagement with science and engineering practices, recurring themes and concepts, and grade-level content.

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

- The materials do not integrate digital technology that provides opportunities for teachers and students to collaborate. For example, the materials do not integrate digital technology that supports student-to-student collaboration. The materials do not integrate digital technology that supports teacher-to-student collaboration.
- The materials do not provide a forum to post class discussions or provide video conferencing, etc. While the Student Engagement documents indicate that students can compete for top placement in the school, district, or class, they compete individually as part of their progress monitoring, not collaboratively in teams or as partners. "Students at each grade level can strive to be on one of several top 10 tables at the Class, School, District, and State levels." Four top 10 categories are based on points: Concept Mastery, Vocabulary Mastery, Science Process Skills, and Science Literacy Points. However, students compete individually and do not get to work in teams or pairs.
- The materials do not offer teachers a platform or any way to virtually conference or collaborate with students.
- Materials do not integrate digital technology that provides opportunities for teachers and students to collaborate. For example, in Science Cognates, students can listen to new science vocabulary in Spanish/English and then record themselves speaking in English. However, it is unclear if or how the teacher can provide feedback, and this is only available to ELL students and not all students.

Summit K12 Dynamic Science Grade 6

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

- The program is fully web-based. The digital materials are accessible and compatible with multiple operating systems and devices. For example, within the support section, in a technical specifications article, a statement declares the materials work on all major platforms, such as iPads, laptops, PCs, MacBooks, and Chromebooks. Worksheets that go with specific labs and activities are downloadable and printable.
- The materials are accessible and compatible with all operating systems and devices. The Parent-Guardian Welcome Letter states that students should be able to access the program from any device with an internet connection. The materials could be accessed through a laptop and desktop computer. Accessing it from an iPhone allowed the user to view the modules.
- Materials integrate digital technology that is compatible with a variety of learning management systems. For example, the Teacher Getting Started document claims that We support access to all major district LMS and SIS platforms through one of the SSO solutions, allowing students to simply click on the Summit K12 icon to immediately access our course. It also says, “We support all major SSO tools like Clever, Classlink, Rapid Identity, and others.”
- Materials integrate digital technology that is compatible with a variety of learning management systems. For example, the Teacher Getting Started document claims that Our support center also provides step-by-step guidance if you would like to download the iOS App from the App Store directly onto your iPads. SummitK12 can be accessed on the website on an Android phone.

Summit K12 Dynamic 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

Digital technology and online components 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.

- The digital technology and online components align with the grade-level scope and approach to science knowledge and skills progression. For example, materials provide information that identifies how online and digital components align with grade-level science knowledge and skills in the materials' scope and sequence and each lesson's header. The materials provide related TEKS and ELPS for online and digital components within the Teacher’s Guide. Teachers may find the codes within each lesson.
- The digital technology and online components are developmentally appropriate for the grade level. For example, videos contained in the Science Videos section are of a length that is developmentally appropriate for 6th graders. In the Matter and Energy videos, the longest video was 12:46 minutes, and the shortest was 6:02 minutes, which is well within the attention span of a 6th-grade student.
- The online digital technology components align with the grade-level scope and approach to science knowledge and skill progression. Each digital activity specifies the TEKS that it correlates to. TEKS and topic list the simulation. All videos are recorded by reporting category and TEKS, and the teacher's e-book guides specify the science TEKS and the RLA TEKS.
- The 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. For example, in the lesson guide for each TEKS, there is a list of applicable ELPS, RTCs, and SEPs under each activity.

- The 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. For example, the Teacher's Guide 1-pager has a link to the 5E Lesson Model. This explains the 5E lesson model and its rationale, including digital technology such as Simulations. There is also a link to a scope and sequence. This provides a timeframe for each year, unit, TEKS, and lesson. The TEKS lesson frame breaks down how much time to spend on different activities, including digital technology.

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

- The materials provide teacher guidance for using embedded technology to support and enhance student learning. For example, the materials support teachers in integrating technology within the program. Materials provide clear instructions and tutorials on using the embedded technology within the teacher platform. Teachers can access directions on the embedded technology using the Getting Started Guide in the Dynamic Teacher's Guide or the Support link at the top of the home page.
- The materials support teachers to integrate the technology within the program successfully. The materials include a Help Center that includes links to information such as Online Tools on Summit K12, how to reset student passwords if there's a login error, troubleshooting audio recording quality issues, etc.
- The materials provide support to teachers to successfully integrate the technology within the program. The materials provide teacher guidance for digital and online assessment tools inside the guidance document for Concept Mastery. This document is located within the teacher resources and walks teachers through all types of assessments with guidance on finding them, examples of what they look like, and the order in which they should be given.
- Materials provide teacher guidance for using embedded technology to support and enhance student learning. For example, the Teacher's Guide 1-pager links to Teacher Getting Started. It claims that there are Teacher Training Courses available online. Another Teacher's Guide 1-pager has links to explanations, including Student Getting Started and Customer Support.
- The materials include resources for parents and caregivers supporting student engagement with digital technology and online components. Clicking on the Support link opens the Help Center. Inside the Help Center is a section called "Using Summit K12-Students." Parents can access this section to find information to help students with online components. The data is available in both English and Spanish.
- Materials are available to parents and caregivers to support student engagement with digital technology and online components. For example, a letter is provided in the Teacher's Guide 1-pager under Additional Resources. The letter provides an overview of the program and how to log in; it is available in English and Spanish.
- There are Home-to-School Connection letters for each TEKS. The letter identifies key points, activities, conversations, vocabulary, and pictures. A reminder at the top of each letter says, "Remember to log in to Summit K12 to view TEKS videos, quizzes, vocabulary boosters, and more!"