

## Publisher Response | Accelerate Learning Inc.

## Chemistry

After years of success providing the most widely used science materials in the state of Texas, STEMscopes Science is proud to provide Texas with the newly developed curriculum created directly from the new TEKS. We have always prided ourselves in being partners with teachers, campuses, and districts across Texas, and helping implement the new TEKS in the Fall of 2024 will be no different. We have accomplished great things in our partnership over the years. Our research studies show that using STEMscopes Science results in more students meeting or exceeding state assessment science proficiency benchmarks. Having access to high-quality K-12 curriculum helps improve U.S. students' science proficiency levels and addresses our country's critical need for students to pursue careers in STEM.

We are honored to have been reviewed by the Texas Resource Review committee and to be given outstanding ratings in all areas. Not only were we recognized as being 100% aligned to both the Science Texas Essential Knowledge and Skills (TEKS) and the Texas English Language Proficiency Standards (ELPS), but we were also recognized as fully meeting all requirements in sections 1, 2, 3, 4, 5, 6 and 8.

While we are ecstatic about those 100% ratings, we at STEMscopes will never settle for less than 100% in all sections. The digital nature of STEMscopes Science allows us the opportunity to enhance our program as needs arise, and we are planning to do that to address the one bullet in section 8 where we were not given full credit. While we were given partial credit for this indicator, we are committed to working with Texas teachers to help improve our product.

The indicator below was scored as "Meets" in three of the four bullets in the review.

7.2 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

The review identified weakness in bullet four stating "The STEMscopedia activity in the Explain section for each scope includes a Scientists in the Spotlight section, which provides a short historical text linking a scientist to a topic but with little to no images. For example, the VSEPR Shapes scope includes a spotlight on Louis and Mary Fieser and Molecule Shapes."

The evidence provided for this indicator in Chemistry was consistent with the evidence provided in our other grade levels and courses that was deemed to fully meet the requirements of the indicator.

Our evidence provided examples of diversity of people and places by pointing to instances of diversity in our product including our phenomena and STEMscopedia that spotlighted diverse scientists including Ida Noddack (German female scientist) and Stephanie Horwovitv (Polish-Jewish female scientist). It appears the reviewers were expecting images in the scientist spotlights. Although the materials do not always include images in the scientist spotlight, information and images in the material intentionally show diversity of communities and places throughout the product.

A few examples of diversity of communities and places can be seen in the following Chemistry scopes and elements:



- Average Atomic Mass, Science Today references Alaskan Natives,
- Nuclear Chemistry Science Today references Futaba, Fukushima,
- Different types of bonds, Scope Phenomena shows an Asian family happily preparing food together,
- Naming Molecules, STEMscopedia scientist Mirabbos Hojamberdiev a Uzbek scientist,
- Naming Molecules, Science Today includes an image of Beirut,
- VSEPR Shape, Science Today highlights a Malaysian woman at an airport in Malaysia
- Nuclear Technology, Picture Vocab, Diagnostic imaging has a female doctor of African descent

The indicator below was scored as "Yes" for three of the four bullets:

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

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

The review identified weakness in bullet three stating "The materials include limited opportunities to integrate digital technology for teacher-to-student collaboration in the sense that there is no virtual whiteboard or forum where the teacher can respond to questions."

The evidence provided for this indicator in Chemistry was consistent with the evidence provided in our other grade levels and courses that was deemed to fully meet the requirements of the indicator. The review indicates that reviewers were expecting digital components such as discussion boards or video conferencing tools.

The review indicates that reviewers were expecting digital components such as discussion boards or video conferencing tools. The product provides teachers with various ways to provide feedback on student digital assignments. We have technical enhancements in our product roadmap that will allow more collaboration between students and teachers, including the ability for students and teachers to message each other. We are also researching the ability for students to collaborate on digital assignments.

STEMscopes Science is proud to have partnered with Texas teachers for over ten years, and we are committed to providing a well-rounded, high-quality science curriculum that supports both teachers and students. Our constructivist approach to science education drives our product and is seen in the 5E + IA learning model (Engage, Explore, Explain, Elaborate, Evaluate, Intervention, and Acceleration.) Our product is designed to engage students with exciting phenomena while using scientific and engineering practices. As students use hands-on learning, they can experience real-world science content while connecting it with recurring themes and concepts to explain the world around them. We are excited to bring our newly updated product to classrooms in Texas and look forward to continuing our partnership with Texas teachers.

