



# STEMscopes™

THE LEADER IN STEM EDUCATION

STEMscopes™ NGSS 3D, created by Accelerate Learning Inc., is an award-winning, research-based national leader in STEM curriculum. Used by over 4.5 million students, STEMscopes prides itself on the systems and structures it has put into place to listen and respond to feedback from our customers, competitors, and external reviewers. We are committed to continually improving the quality of our products and services so that we can best serve those who matter most: teachers and students. In that spirit, we appreciate the opportunity to review and consider the feedback provided by EdReports. Here, though, we offer a rebuttal that reflects our belief that the overall evaluation of EdReports does not accurately characterize the strengths and underlying design principles of our curriculum.

## A fair and thorough review was not done.

Accelerate Learning Inc. vehemently disagrees with the findings from EdReports and feels that EdReports did not conduct an impartial and thorough review of the program. EdReports has stated that five team members were assigned to review STEMscopes™ NGSS 3D. On their website they claim that “All team members look at every grade and indicator, ensuring that the entire team considers the program in full. Teams touch every page of the series” (EdReports, 2020, FAQ). In fact, our data analytics tell a very different story:

- Only 25% of our product was accessed (clicked on) five times or more. This means that it is impossible that all five reviewers touched every part of our product.
- Much of the content, 52%, that was viewed was only accessed (clicked on) one or two times total.

It is evident that the program was not reviewed in full by all five reviewers.

## The rubric was skewed in a direction that does not reflect the original intention of Next Generation Science Standards or the *Framework*.

The review of STEMscopes™ NGSS 3D by EdReports focused on a subjective interpretation of the objectives of the NRC’s *Framework for K–12 Science Education* and the NGSS standards. EdReports reviews for ELA and math are very focused on reviewing programs against the Common Core standards, while the science rubric focuses very little on alignment to NGSS standards and almost completely on phenomena. This is one reason why there are far more programs identified as “Meets Expectations” for ELA and math as opposed to science.

When designing and writing the STEMscopes™ NGSS 3D curriculum, we leaned on guidance from the Framework, the NGSS, Evidence Statements, Classroom Sample Assessment Tasks, NGSS Example Bundles, and even actual writers of the standards who served on our advisory board. There are many personal opinions and beliefs, as well as propaganda, about what science education should look like in the arena today; we chose to get our information straight from the source.

## Interpretation of the Three Dimensions

The Framework states the following: “We also acknowledge that there is no single approach that defines how to integrate the three dimensions into standards, curriculum, instruction, and assessment” (NRC, p. 217). It is clear from the EdReports review of not only STEMscopes™ NGSS 3D but also other curricula that they are looking for a specific approach on how three-dimensional learning is done. It is not a coincidence that there is only one program that EdReports has deemed “Meets Expectations.” There are multiple instances in the review of STEMscopes™ NGSS 3D where evidence is found in statements such as “The materials include multiple instances for students to use the three-dimensions” and “Multiple opportunities for student sensemaking in the three-dimensions are present,” yet we still received a 0 rating for that criteria.

## Emphasis on Phenomena-Based Learning

Our biggest concern with the review criteria is the importance that EdReports give phenomena. After fully studying the Framework, we can find no evidence that it is stated that every learning experience needs to be connected to a singular phenomenon. In fact, on pages 219–239 of the Framework, where they provide illustrations on how the three dimensions can be integrated into curriculum and instruction, there are no examples of overarching phenomena. The lens through which EdReports views phenomena means that students learn through one event, which limits the scope and experiences that students have access to in science. This idea does not take into account how multiple phenomena can help engage student learning. We want our students to be critical thinkers and problem solvers, and by engaging in multiple types of phenomena, students have that opportunity.

The way that STEMscopes™ NGSS 3D incorporates phenomena allows students to draw from experiences that are related but not identical to the phenomena question they are trying to answer. This allows them to practice problem-solving the way they will be asked to in the real world. At STEMscopes™ NGSS 3D, we acknowledge that students and teachers come into the classroom with a variety of backgrounds and preconceptions. Phenomena are infused into all STEMscopes activities from beginning to end in the 5E+IA lesson model. Focusing on one particular phenomenon per NGSS Performance Expectation, as EdReports would like all curricula to do, limits the scope of experiential learning and is the antithesis of what equity means when dealing with student achievement. While we offer phenomena, we have built our STEMscopes™ NGSS 3D product to serve as a model for teachers to use rather than a script for them to follow.

## Lack of Respect for Teachers as Professional Decision Makers

The true nature of NGSS encourages the need for flexibility and variety in the design of learning experiences around student interest and backgrounds. We believe in empowering teachers to do the most important job there is instead of providing them with a script written by professors or curriculum writers who do not know the needs of each individual child in their classroom. The EdReports review protocol is looking for a rigid and scripted curriculum product that teachers would follow in lockstep. This is not in accordance with the Framework, which states the following when talking about equity: “Students were able to develop science-linked identities by realizing that science could be meaningfully related to circumstances of their own lives, which they could then investigate [41]. In many cases, a culturally responsive approach to science instruction involves the recognition of community practices and knowledge as being central to the scientific endeavor [42]” (NRC, p. 285). Teaching is not a one-size-fits-all approach. We provide districts, campuses, and teachers with a variety of resources for them to teach their students in the best way they see possible.

# This review is incongruent with what our customers and other reviewers have said.

STEMscopes™ NGSS 3D has been thoroughly reviewed by states, districts, and other organizations with much broader and rigorous criteria and is often found to be the best curriculum aligned to the NGSS and the Framework on the market.

## State Reviews

Our STEMscopes™ NGSS 3D curriculum has been adopted in the following states:

- **Oregon**—one of two programs to receive “exemplary” status
- **California**
  - 100% alignment with Category 1 (CA NGSS Three-Dimensional Learning)
  - Strengths in Categories 2–5
- **New Mexico**
  - Middle School Physical Science 97%
  - Middle School Earth and Space Science 95%
  - Middle School Life Science 99%
- **West Virginia**—Meeting 100% of Evaluation Specific Criteria (Non-Negotiable)
- **Idaho**—received “Comprehensive Program” recommendation

## Learning List Review

STEMscopes™ NGSS 3D has also received the highest rating for alignment to the NGSS from Learning List, an instructional materials review service for schools and districts that focuses strictly on curriculum product alignment to standards and not fluff. “Our detailed alignment reports reveal where the material is aligned not only to the Performance Expectations (PE) but also to the DCIs, CCCs, and SEPs that comprise each PE. Our reviews show that this material provides teachers with multiple opportunities to help students engage in science and think like scientists,” said Jackie Lain, president of Learning List.

## Case Studies and Awards

At Accelerate Learning Inc., we feel that having data that shows our product is having success in achieving the goals of the Framework is more important to us than any review. Our STEMscopes™ case studies are longitudinal in nature and focus on real classrooms. Leveraging thousands of schools at once, time and time again, STEMscopes™ has demonstrated its ability to improve student academic outcomes and dramatically boost the performance of EL students and other subpopulation groups. If you would like to view these case studies they can be found on our website.

## Awards

STEMscopes™ NGSS 3D has received a number of awards on a national level. A few of them earned in the last year are highlighted here:

- SIIA Education Technology – 2020 CODiE Award Finalist  
*Finalist for Best Science Instructional Solution for Grades 9–12 and Higher Education and Best STEM Instructional Solution for Grades PreK–8*
- 2019 American Business Awards – Gold Stevie Award  
*Winner of the Gold Stevie® Award in the Science Instructional Solution category*
- Tech & Learning – 2019 Awards of Excellence  
*Winner of Best Use of a Product in a School category*
- EdTech Breakthrough Awards – 2019 STEM Education Solution Provider of the Year  
*Overall STEM Education Solution Provider of the Year award*
- 2019 EdTech Awards – Finalist for Trendsetter Award  
*Finalist for a Trendsetter Award in the EdTech Company Setting a Trend category*

Please consider a more holistic view of our award-winning curriculum when making your purchasing decisions.

At Accelerate Learning Inc. we are proud of the product that we have developed and the success that it is bringing to teachers and students around the United States. Because of this, we promise to continue to create a product that is always 100% aligned to standards and contains hands-on, inquiry experiences for all students and teachers.

### CITATIONS

National Research Council. (2012). *A Framework for K-12 Science Education: Practices, Crosscutting Concepts, and Core Ideas*. Committee on a Conceptual Framework for New K-12 Science Education Standards. Board on Science Education, Division of Behavioral and Social Sciences and Education. Washington, DC: The National Academies Press.

EdReports.org, Inc. (2020). Frequently Asked Questions: Who We Are, What We Do, and Why. Retrieved April 14, 2020, from <https://www.edreports.org/about/faq>.