**This advisory recommendation has not been approved by the Instructional Quality Commission or the State Board of Education.**

# REVIEW PANEL ADVISORY RECOMMENDATION2018 SCIENCE ADOPTION OF INSTRUCTIONAL MATERIALS

| **Publisher** | **Program** | **Grade Level(s)** |
| --- | --- | --- |
| Accelerate Learning, Inc. | STEMscopes CA NGSS 3D | 6–8d |

## Program Summary:

STEMscopes CA NGSS 3D includes: STEMscopes CA NGSS 3D includes: a digital subscription; student notebook; and STEMscopedia.

## Recommendation:

STEMscopes CA NGSS 3D is recommended for adoption for 6–8d because the instructional materials include content as specified in the Next Generation Science Standards for California Public Schools (CA NGSS) and meet all the criteria in Category 1 with strengths in categories 2–5.

## Criteria Category 1: Alignment with the CA NGSS Three-Dimensional Learning

The program includes content as specified in the CA NGSS and includes a well-defined sequence of instructional opportunities that provides a path for all students to become proficient in all grade-level performance expectations.

**Citations:**

* Criterion #1.1: Grade 6, Homepage, Scopes, Segment 1, Middle School Earth and Space Sciences: The Earth and the Solar System, Earth-Sun-Moon System, Standards Alignment; Grade 7, Homepage, Scopes, Segment 1, Cells, Standards Alignment; Grade 8, Homepage, Scopes, Eighth Grade Physical Science, Structure of Matter, Standards Alignment. In every domain, there are Disciplinary Core Ideas.
* Criterion #1.2: Grade 6, 7, 8 Homepage, Scopes, Segment: Growth and Organisms. We found numerous exemplars of the standards being fully covered in middle school via the 5E learning sequences. All segments, all grades have the same 5E template.

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* Criterion #1.4: Grade 6 Homepage, Scopes, Earth and Space Science, Segment 4: The Water Cycle. For each Scope in all domains,
* Performance Expectations are linked with specific three-dimensional instructional sequences in an organized sequential manner.
* Criterion #1.7: Grade 6 Homepage, Scopes, Earth and Space Science, the Solar System, Elaborate. Use of primary sources, scientific research, case studies, and photographs are integrated through multiple scopes within the program.
* Criterion #1.8: Grade 8, Homepage, Scopes, Synthetic Materials, Explore. Numerous exemplars of students being able to investigate, model, and explain using the targeted Disciplinary Core Ideas and Crosscutting Concepts.
* Criterion #1.13: Grade 8, Homepage, Scopes, Segment: Properties of Visible Light. There are numerous materials that provide support for students to develop grade-level-appropriate academic language and discipline-specific vocabulary.
* Criterion #1.15; Grade 7, Homepage, Scopes, Growth of Organisms, Standards Alignment. We found evidence of the Environmental Principles and Concepts in the standards alignment. They are also embedded in various stages of the 5E cycle.

## Criteria Category 2: Program Organization

The organization and features of the instructional materials support instruction and learning of the CA NGSS.

**Citations:**

* Criterion #2.1: Grades 6, 7, and 8, Teacher Planning Companion (no page numbers in print copy). STEMscopes provides a storyline page for each grade level demonstrating the sequential organization of the program.
* Criterion #2.2: Grade 7, Homepage, Scopes, Natural Selection, Explore 3. Guided teacher questions are included in the Engage and Explore Sections. Example: 7D Life Natural Selection (Assessing Prior Knowledge, Hook, Explore 3).
* Criterion #2.4: Grade 6, 7, 8, Homepage, Scope, 6D Earth, Sun, and Moon System, Assessing Prior Knowledge. Formative assessments are found in each scope, including Assessing Prior Knowledge.
* Criterion #2.5: Grade 6, 7, 8, Teacher Planning Companion (no page numbers in print copy). Each grade level has content to fill the 180 day instructional calendar.

## Criteria Category 3: Assessment

The program includes multiple models of both formative and summative assessment tasks for measuring what students know and are able to do and provides guidance for teachers on how to use scoring rubrics and interpret assessment results to guide instruction.

**Citations:**

* Criterion #3.1: Grade 8, Homepage, Scopes, 8D Physical Changes in Forced Motion, Evaluate, Claim – Evidence – Reasoning Assessments (CERs). Stemscopes includes CER Assessments that evaluate students by engaging in scientific discourse.
* Criterion #3.5: Grade 6, Homepage, Scopes, Segment Formation and Motion of Galaxies, Evaluate. Numerous types of assessments help teachers evaluate all students to see where they need intervention or where they are ready to accelerate.
* Criterion #3.8: Grade 7, Life Growth of Organisms, Explore 1, Claim – Evidence – Reasoning Assessments (CERs). There are numerous opportunities for assessment through both writing and performance tasks.
* Criterion #3.10: Grade 7, Student Notebook, pages 29-38, Evaluate, Intervention, Accelerate. Assessments tools include multiple measures of student performance, including engineering design, lab practical tasks, performance-based tasks, open-ended and short-answer essay responses, and oral presentations.

## Criteria Category 4: Access and Equity

Program materials ensure universal and equitable access to high-quality curriculum and instruction for all students and provide teachers with suggestions for differentiation for students with special needs.

**Citations:**

* Criterion #4.1: Grade 7, Homepage, Segments, Teacher Toolbox. There is exemplary evidence in grade 7 of how the teacher resources provide support for a wide variety of student needs.
* Criterion #4.2: Grade 6, 7, 8, Homepage, Scopes, Teacher Toolbox: Middle School ELD Strategies Alignment (no page numbers). Supports for English learners are listed in each lesson.
* Criterion #4.3: Grade 6, 7, 8, Homepage, Scopes, Teacher Toolbox: Secondary Interventions Tab. Instructional resources incorporate instructional strategies to address the needs of students with disabilities in lessons, assessments, and teacher resource at every grade level.
* Criterion #4.4: Grade 7, Homepage, Scopes, Teacher Toolbox. Teacher resources for differentiation can be found in the Teacher Toolbox.

Criteria Category 5: Instructional Planning and Support

The instructional materials provide coherent guidelines for teachers to follow when planning three-dimensional instruction and are designed to help teachers provide effective standards-based instruction.

**Citations:**

* Criterion #5.1: Grade 6, Teacher Planning Companion (no page numbers in print copy): Segment 1 Earth and the Solar Systems. Organizes anchoring phenomena, scopes, and phenomena with instructional time teaches can use/follow when planning.
* Criterion #5.5: Grade 7, Homepage, Scopes, Flow of Energy in Ecosystems. Under the “Home” tab there are standards alignment. Also under the “Home” tab you will find resources under Teacher background.
* Criterion #5.10: Grade 7, Homepage, Scopes, Domain: Life Science, Cells, Home. Student resources do not explicitly state learning guides prior to instruction and instead introduce phenomenon and guiding questions to build the development of learning goals, for all scopes.
* Criterion #5.12: Grade 6, 7, 8 Homepage, Segments, Teacher Toolbox, Safety. The Toolbox provides safety standards for middle school. Additionally if one of the 5E sections requires materials, the section explicitly states what is needed.

## Edits and Corrections:

The following edits and corrections must be made as a condition of adoption.

| # | Grade Level | Component | Page Number(s) | Current Text | Proposed Corrected Text | Reason for Edit |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | 6 | SE | p. 159 | CO2 | CO2 | Typo |
| 2 | 8 | SE | p. 6 | CaCO3 | CaCO3 | Typo |
| 3 | 8 | Student Notebook | p. 437 |  | p. 437 is duplicated on p. 439 | Typo |
| 4 | 8 | Student Notebook | p. 447 | A diver standing on top of a diving platform that is 20 m above the ground dives off the platform. | A diver standing on top of a diving platform that is 20 m above the pool dives off the platform. | Clumsy sentence. |

## Social Content Citations:

The panel identified the following social content violations:

| # | SC Code | Grade Level | Component | Page Number(s) | Current Text | Proposed Corrected Text | Reason for Citation |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | L.1. | 6 | Digital Teacher Material | Earth Explore 1 Materials | The materials list calls for the use of a “Thermos”. | Substitute “vacuum insulated container” for “Thermos.” | Brand names and corporate logos |
| 2 | L.1. | 6 | Digital Teacher Material | Geoscience Explore 1 Teacher Prep Video | Honey Maid crackers are displayed in the video.  | Blur the label, or remove crackers from the box. | Brand names and corporate logos |
| 3 | L.1. | 6 | Digital Teacher Material  | Geoscience Explore 2 Teacher Prep Video | Pillsbury frosting in the video. | Remove cover from the container. | Brand names and corporate logos |
| 4 | L.1. | 6  | Digital Teacher Material | Seafloor Explore 1 Teacher Prep Video | Sharpies in video. | Cover or blur logo. | Brand names and corporate logos |
| 5 | L.1. | 6 | Digital Teacher Material | Tectonics Explore 1–3 Teacher Prep Video | Nikon camera and Sharpies in the video.  | Cover or blur logo. | Brand names and corporate logos |
| 6 | L.1. | 6 | Digital Teacher Material | Weather Explore 2 and 4 Teacher Prep Video  | Google Search Engine, Macbook Air | Change to generic search engine, and cover logo. | Brand names and corporate logos |
| 7 | L.1. | 6  | Digital Teacher Material | Weather Explore 3 Teacher Prep Video | Coca-Cola can is displayed. | Cover or blur logo. | Brand names and corporate logos |
| 8 | L.1. | 6 | Digital Teacher Material | Ocean Currents Explore 2 Teacher Prep Video | Apple computer is displayed. | Cover or blur logo. | Brand names and corporate logos |
| 9 | L.1. | 6 | Digital Teacher Material | Influence of Weather Explore 1 Teacher Prep Video | Sharpies in video. | Cover or blur logo. | Brand names and corporate logos |
| 10 | L.1. | 6 | Digital Teacher Material | Human Dependence Explore 3 Teacher Prep Video | Google Search Engine, Macbook Air | Cover or blur logo. | Brand names and corporate logos |
| 11 | L.1. | 7  | Digital Teacher Material | Bodies and Systems Explore 2 Teacher Prep Video | Diet Coke and Ziploc logo displayed. | Cover or blur logo. | Brand names and corporate logos |
| 12 | L.1. | 7 | Digital Teacher Material | Energy Flow Explore 3 Teacher Prep Video | Diet Coke displayed. | Cover or blur logo. | Brand names and corporate logos |
| 13 | L.1. | 7 | Digital Teacher Material | Relationship Ecosystems Explore 2 Teacher Prep Video  | Crayola markers displayed. | Cover or blur logo. | Brand names and corporate logos |
| 14 | L.1. | 7 | Digital Teacher Material | Inheritance Genetic Explore 4 Teacher Prep Video | Macbook Air is displayed. | Cover or blur logo. | Brand names and corporate logos |
| 15 | L.1. | 8 | Digital Teacher Material | Structure of Matter Explore 1 Teacher Prep Video | Elmer’s Glue is displayed. | Cover or blur logo. | Brand names and corporate logos |
| 16 | L.1. | 8 | Digital Teacher Material | Physical and Chemical Properties Teacher Prep Video | Kool-Aid and Karo Syrup are displayed. | Cover or blur logo. | Brand names and corporate logos |

California Department of Education, August 2018