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

# REVIEW PANEL ADVISORY RECOMMENDATION 2018 SCIENCE ADOPTION OF INSTRUCTIONAL MATERIALS

| **Publisher** | **Program** | **Grade Level(s)** |
| --- | --- | --- |
| McGraw-Hill School Education | California Inspire Science | K–6 |

## Program Summary:

California Inspire Science includes: SE: Student Edition; TE: Teacher’s Edition; SRA: Read Aloud; OL: Online

## Recommendation:

California Inspire Science is recommended for adoption for K–6 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: Grade K, SE/TE Unit 2 pp.72-73 and pp.83-84; Grade 1, SE/TE Unit 1 pp.42, pp.87-88 and SE/TE Unit 2 pp.27, pp.69-70; Grade 2, SE/TE Unit 1 pp.16-17, pp.26-27, pp.51-52, pp.59-64; Grade 3, SE/TE Unit 3 pp.26-28; Grade 4, SE/TE Unit 3 pp.44-59; Grade 5, SE/TE Unit 1 pp.24-27. The program includes numerous exemplars of the standards being fully covered in Grades K-5.
* Criterion #2: Grade 1, TE Unit 3 pp.8-15, specific example of integration of instruction: SEP p.15, CCC p.11, and DCI p.8; Grade 3, TE Unit 2 pp.22-36, specific example of integration of instruction: SEP p.33, CCC p.33, and DCI p.22. Exemplars are prevalent throughout the K-5 program that provide instructional resources to engage students in using text, discourse, and experiential learning to develop mastery of the three integrated dimensions of the CA NGSS: the SEPs, the CCCs, and the DCIs.

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* Criterion #11: Grade K, SE/TE Unit 4 p.43; Grade 1, Online Module: Animal Parents and Their Offspring, Module Library, STEM Connection: Temple Grandin, <https://my1.mheducation.com/coursemaps/course.php/folders/1719957/overview?clid=5003200023476>; Grade 5, SE/TE Unit 3 p.49. The K-5 program provides many exemplars of resources that include examples of people and groups who used their context, learning, and intelligence to make important contributions to society through science and technology from different demographic groups: Native Americans; African Americans; Mexican Americans and other Latino groups; Asian Americans; Pacific Islanders; European Americans; lesbian, gay, bisexual, and transgender Americans; persons with disabilities; women; and members of other ethnic and cultural groups. Resources emphasize the importance of science education to all members of our society in a way that is culturally and socially authentic.
* Criterion #12: Grade 2, SE/TE Unit 1 pp.2I-2J; Grade 4, SE/TE Unit 1 p.17. The program consistently provides student assignments that make linkages and are consistent with the grade-level appropriate expectations in the California Common Core State Standards for English Language Arts and Literacy in History/Social Studies, Science, and Technical Subjects (CA CCSS for ELA/Literacy), the California English Language Development Standards: Kindergarten through Grade 12 (CA ELD Standards), and California Common Core State Standards: Mathematics (CA CCSSM) and are consistent with the guidance in the CA Science Framework.
* Criterion #14: Grade 2, Online, Program Resources: Course Materials, Course Planning Resources, Supporting All Learners, Universal Access; Grade 5, TE Unit 2 pp.10-11 and Unit 3 pp.2I-2J; Grade 5, Online, Module: Earth’s Patterns and Movement, Module Planning Resources, Language Building Resources: Earth’s Patterns and Movement**.** Teacher resources throughout the K-5 program consistently provide guidance to support all students, including language learners and non-standard English speakers, to develop their science-related language and reading abilities, and to coordinate the multiple elements (text, diagrams, graphs and charts, etc.) that occur in science textual materials.

## Criteria Category 2: Program Organization

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

**Citations:**

* Criterion #1: Grade 5, Program Overview: Welcome to Inspire Science, Get Started, Program Guide, pp.8-9, <https://connect2.mheducation.com/coursemaps/course.php/folders/1719694/overview?clid=5003200023469>. Sequential organization of the material provides structure concerning what students should learn each year and allows teachers to convey the science content incorporating the three-dimensional learning expressed in the CA NGSS.
* Criterion #3: Grade K, Unit 1 p.2C. The K-5 program consistently provides instructional resources that explicitly state which knowledge and skills learned in prior grades or units are applied and extended to accommodate new knowledge and skills.
* Criterion #6: Grade 3, SE/TE Unit 2 pp.44E-44F, 48A-48B. The content across grade levels K-5 is well organized and presented in a manner consistent with providing all students an opportunity to achieve the essential knowledge and skills described in the CA NGSS and the CA Science Framework.
* Criterion #11: Grade 2, OL: <https://connect2.mheducation.com/coursemaps/course.php/folders/1719915/overview?clid=5003200023474>. Teacher resources across grade levels K-5 include many references to supplemental open educational resources.

## 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 #1: Grade 2, SE/TE Unit 4 pp.50-52 and TE Unit 4 pp.2A-2B. Assessments in the instructional resources reflect the three-dimensional nature of the CA NGSS and the CA Science Framework. Assessment tools measure what students know and are able to do, as defined by the PEs in the CA NGSS. Assessments stress performance tasks rather than rote memorization.
* Criterion #2: Grade K, SE/TE Unit 1 p.41. Entry-level assessments across grade levels K-5 for each unit are provided to help teachers elicit students’ prior knowledge and preconceptions and information is provided to help teachers use the results of those assessments to guide instruction and determine modifications for specific groups of students.
* Criterion #4: Grade 5, SE/TE Unit 4 p.11. Claim, evidence, and reasoning formative assessments are embedded in all units grades 1-5. These assessments are designed to elicit current understandings and preconceptions and to provide evidence of students’ progress toward mastering the three-dimensional learning called for in the CA NGSS and the CA Science Framework. Additionally, the instructional materials provide teachers with strategies of how to address preconceptions during instruction.
* Criterion #7: Grade 3, SE/TE Unit 1 pp.85-90. Summative assessments throughout the program provide valid, reliable and fair measures of students' progress and attainment of three-dimensional learning after a period of instruction and involve multi-component tasks including, but not limited to: hands-on or simulation-based performance tasks, open-ended constructed response problems, and scoring of portfolios of student work collected over the course of instruction. Selected-response items, when used, require analysis and reasoning to answer them, rather than simply memorized responses.
* Criterion #10: Grade 4, Engineering Design and Lab Practical Tasks, Unit 1 pp.64-66; Grade 4, Performance-based Tasks, Unit 4 pp.48-50; Grade 4, Open-ended Responses, Unit 3 p.41; Grade 4, Short Answer Response, Unit 2 p.41; Grade 4, Essay Response, Unit 2 p.38; Grade 4, Lab Reports, Unit 1 p.66; Grade 4, Research Projects, Unit 3 pp.118-119; Grade 4, Computational Simulations, Online Module: Energy and Motion, Lesson 3: Energy Transfer in Collisions, Explain, Inquiry Activity: Newton’s Cradle, p.2, Simulation: Newton’s Cradle, <https://connect2.mheducation.com/coursemaps/course.php/folders/1719734/overview?clid=5003200023470>; Grade 4, Oral Presentations, Unit 4 p.50. Assessment tools include multiple measures of student performance as addressed in the assessment chapter in the CA Science Framework, including, but not limited to, engineering design and lab practical tasks; performance-based tasks; open-ended, short answer and essay responses; lab reports; research projects; computational simulations; 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 #1: Grade K, TE Unit 1 pp.2I-2J; Grade K, TE Unit 2 p.11; Grade K, TE Unit 3 p.23. The instructional resources reflect the goals of access and equity outlined in chapter 10 of the CA Science Framework.
* Criterion #2: Grade 1, TE Unit 3 pp.2I–2J and Unit 4 p.30. At each grade level K-5, lesson and overarching unit teacher resources include research-based strategies to address the needs of English learners consistent with the CA ELD Standards.
* Criterion #3: Grade 4, TE Unit 2 pp.2I-2J and Grade 4, TE Unit 3 p.9; Grade 4, TE Unit 4 p.80. Instructional resources incorporate instructional strategies to address the needs of students with disabilities in lessons, assessments, and teacher resources, as appropriate, at each grade level.
* Criterion #4: Grade 2: Online Program Resources: Course Materials, Course Planning Resources, Supporting All Learners, Differentiated Paths, <https://connect2.mheducation.com/coursemaps/course.php/folders/1719900/overview?clid=5003200023474>. The teacher resources for K-5 include numerous examples of differentiated pathways within the teacher resources, including guidance and support for standard English learners, English learners, long term English learners, students living in poverty, foster youth, girls and young women, advanced learners, students with disabilities and students below grade level in science skills, three-dimensional learning, literacy skills, or mathematics skills.

## 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 #2: Grade K, TE Unit 1 pp.2E-2F, 42C-42D; Grade K, TE Unit 2 pp.52G-52H. The teacher resources provide an estimated instructional time for each activity, lesson, chapter, and unit which allows for student engagement in the SEPs and engineering design projects.
* Criterion #7: Grade 4, TE/SE Unit 1 pp.8-9. K-5 teacher and student resources have correlating page numbers in print resources or corresponding references in electronic resources.
* Criterion #9: Grade 1, TE Unit 3 pp.22A-22B, p.55. Grade 1, Online Module: Structures and Functions, Module Planning resources, Letter to Home, <https://connect2.mheducation.com/coursemaps/course.php/folders/1719935/overview?clid=5003200023476>. Instructional objectives for three-dimensional learning are explicitly stated and clearly identifiable in the teacher resources. Teacher resources include guidance on explaining these objectives to parents.
* Criterion #17: Grade 2, Online, Module: Plant Structures and Functions, Module Planning Resources, Instructional Resources, Letter to Home, <https://connect2.mheducation.com/coursemaps/course.php/folders/1719933/overview?clid=5003200023474>. Suggested homework extends and reinforces classroom instruction. Homework provides opportunities to support student learning through shared experiences with family. Opportunities include projects, journaling, reflection, or interviews with parents around a concept or activity.

## 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 | 2 | TE | Unit 4, p.58A, paragraph 2 | “The diversity of live” | “The diversity of life” | typo |
| 2 | K | TE | Unit 2, p.83 | “classeoom” Student Edition text picture | “classroom” | typo |
| 3 | 3 | SE/TE | Unit 1, p.8, paragraph 1 | “In the video, you observed the kids move down a bumpy slide.” | “In the video, you observed a carnival ride that moves in a circle.” | Video for Lesson 1 Inquiry Activity references “bumpy slide”, but video not viewed until Lesson 2. |

## Social Content Citations:

The panel identified the following social content violations: None

California Department of Education, August 2018