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

# Review Panel Advisory Recommendation 2025 Mathematics Instructional Materials Adoption

| **Publisher** | **Program** | **Grade Level(s)** |
| --- | --- | --- |
| TPS Publishing Inc. | *STEAM into Big Ideas* | Mathematics 1 |

## Program Summary:

The *STEAM into Big Ideas* Mathematics 1 program includes the following: Big Ideas Math I Teacher Project Guide (PGM1TE). Big Ideas Math I Student Project Guide (PGM1SE). Real Numbers - Teacher Edition (RNM1TE). Real Numbers - Student Edition (RNM1SE). Math I - Combined Strategies - Teacher Edition (CSM1TE). Math I - Combined Strategies - Student Edition (CSM1SE). iMast STEM Guides (IMAST). Environmental Principles and Concepts Activity Book (ECP). Math I - Assessment Generator (AGM1). Interactive Assessment tool (IST). Interactive Homework System (IHS). Intervention Focus Tutorial (IFT). Grade 3 STEM Teacher Project Guide (SPGG3TE). Big Ideas Grade 4 Teacher Project Guide (PGG4TE). Grade 8 STEM Teacher Project Guide (SPGG8TE). Grade 8 STEM Student Project Guide (SPGG8SE). STEAM into Big Ideas Mathematics - Implementation Guide (IGCG).

Big Ideas - Math Online STEAM Library - Middle. Big Ideas - Inclusive Community Reader Activity Library. Big Ideas - Inclusive Community Math After School Math Club Library. Big Ideas - Inclusive Community Math After School PSHE Library. Big Ideas - Inclusive Community Math Literacy and Reteach Library. Big Ideas - Inclusive Community Preferred Supplier 'Didax' Library. Big Ideas - Inclusive Community Homework and Applied Math Library. Big Ideas - Teacher Support - Blackline Master. Big Ideas - Teacher Support. Big Ideas - Environmental Principles and Concepts. Big Ideas - Online Assessment Library K–8.

## Recommendation:

*STEAM into Big Ideas* is not recommended for adoption for Mathematics 1 because it is not aligned with the *California Common Core State Standards for Mathematics* (*CA CCSSM*), and does not meet all of the evaluation criteria in category 1, and does not show strengths in categories 2–5.

### Criteria Category 1: Mathematics Content/Alignment with Standards

The program does not support teaching to the *CA CCSSM* for the intended grade level(s) in alignment with the *Mathematics Framework for California Public Schools: Kindergarten Through Grade Twelve*. The program does not meet all of the evaluation criteria in category 1.

#### Citations:

* Criterion 1.1: Standards Not Met:
* SMP 3: PGM1TE pp. 5, 104. Teacher guidance does not clearly state strategies for engaging and encouraging student-led questioning, communicating, and explaining.
* SMP 6: SMP Activities Rubric, Possible Math Approach for Discussion and rubric statements: PGM1TE pp. 348, 350. The elements included in the program’s Attend to Precision Mastery Levels statements do not develop the student’s ability to attend to precision.
* A-SSE.1b: Affordable on Any Budget, problem 9: RNM1TE p. 85. Students are not asked to interpret the parts in context. CSM1TE pp. 23–31. The problems presented do not include opportunities to interpret complex expressions by viewing one or more of their parts as a single entity.
* A-CED.1 CSM1TE pp. 228, 300, 153: Two-variable absolute value equations are represented but lacks equations and inequalities representing one-variable absolute values. Students are not asked to create one-variable or simple exponential equations or inequalities or to utilize mathematical modeling. Math I - Assessment Generator: This tool references basic equations but does not address inequalities or absolute value.
* A-REI.3 CSM1TE pp. 113–122: A teacher might expect to see simple exponential equations such as “solved for; exponential of a form, such as 2^x=1/16. CSM1SE 9” p. 113–112. A student might expect to see simple exponential equations as stated in the standard. Problems do not include exponential form.
* A-REI.3.1 CSM1TE pp. 123–154: A teacher might expect to see in-context single variable absolute value equations and inequalities in this lesson; pp. 123–138. One-variable absolute value is represented without context.
* A-REI.5 CSM1SE pp. 155–163: The program did not give students the opportunity to “prove that, given a system of two equations in two variables, replacing one equation by the sum of that equation.”
* Criterion 1.2: IM 1, Modeling for Profit: PGM1TE pp. 98–121. The program does not fully develop conceptual understanding of key mathematical concepts.
* Criterion 1.3: IM 1, CSM1TE p. 23, “it’s” uses a possessive pronoun; RNM1SE: p. 12, “mass” and “weight” used interchangeably; CMS1SE: p. 470, “Lines that have a fixed and point on one side is called a ray. otherwise it is known as a ray” (sic). Instructional materials contain many inaccuracies and instances of improper grammar and spelling.

### Criteria Category 2: Program Organization

The organization and features of the instructional materials do not support instruction and learning of the standards.

#### Citations:

* + Criterion 2.1: IM 1, Projects Prior Knowledge: PGM1TE pp. 3–4. The program does not meet the requirements for relating the concepts of the Big Ideas in previous and future grades and the Big Ideas are not fully integrated into strategically designed opportunities for students to use the mathematical practices. <https://www.tpspublishing.com/my-resources/index.php?menu=1254&resource=5981&page=3#page=92>
  + Criterion 2.4: IM 1, Student Journal: PGM1SJ pp. 11, 16, 17. Intervention components, if included, are not designed to help teachers respond to students’ progress in mathematics. The suggested interventions do not meet the requirements to give students access to rich, connected ideas, helping them to develop number flexibility as defined in the *Mathematics Framework*.
  + Criterion 2.4: IM 1, Student Journal: PGM1SJ pp. 23–40. The program does not meet the requirements to give students access to rich, connected ideas, helping them to develop number flexibility as defined in the *Mathematics Framework*.
  + Criterion 2.6: IM 1, See component list above. The program does not contain an overview of clearly defined chapters or units.
  + Criterion 2.9: IM 1, Pacing and Planning: PGM1TE pp. lxix–lxxxv. A list of the CA CCSSM, organized around and within the major concepts, is included in the teacher guidance, together with page-number citations or other references that demonstrate alignment with the content standards but does not include the Standards for Mathematical Practices.

### Criteria Category 3: Assessment

The instructional materials do not contain strategies and tools for continually assessing student understanding and opportunities for new learning.

#### Citations:

* Criterion 3.1: IM 1, Student Reflection: PGM1TE p. 17. Student and teacher materials do not include formative assessments using multiple methods to assess student understanding as a means of informing instruction. Student reflections on projects occur only after the project ends.
* Criterion 3.4: IM 1, Teacher Implementation Guide – Assessment: IGCG pp. 47–69. Teacher materials rarely include suggestions on the use of assessment data to guide decisions about instructional practices or on ways to modify instruction so that all students are consistently progressing toward meeting or exceeding the standards.
* Criterion 3.5: IM 1, Levels 1–3 Assessment Generator sample for Math I and K8–Math I: AGM1. At each grade level, instructional materials rarely provide assessment practices (e.g., entry-level, diagnostic, formative, interim, skill-based, and summative) necessary to prepare all students for success in higher mathematics instruction.
* Criterion 3.6: IM 1, Levels 1–3 Assessment Generator sample for Math I and K–8 - Math I: AGM1. Teacher and student materials rarely include curriculum-embedded assessments that permit teachers to scaffold student learning. Teacher materials lack guidance for diagnostic feedback.
* Criterion 3.6: IM 1, Environmental Principles and Concepts Project, tasks with rubric: PGM1TE p. 338, pp. 331–351. Teacher materials lack guidance for diagnostic feedback.

### Criteria Category 4: Access and Equity

Program resources do not incorporate recognized principles, concepts, and research-based strategies to meet the needs of all students and provide equal access to learning through lessons that are relevant to the students. Instructional resources do not include suggestions for teachers on how to differentiate instruction to meet the needs of all students. Instructional resources do not provide guidance to support students who are English learners, at-promise, advanced learners, and students with learning disabilities.

#### Citations:

* Criterion 4.1: IM 1, English Language Development - PGM1TE: pp. xxix–xxxiv Instructional materials include scaffolds that do not allow for work along the learning progressions in response to student the needs of students learning English and students with disabilities.
* Criterion 4.3: IM 1, STEM Project Student-researched Teen Driving Premiums, pp. 111–115. Curriculum lacks clear teacher guidance to adapt the curriculum to meet students with identified special needs.
* Criterion 4.5: IM 1 Cognates listing - A1M1COG: pp. 359–362. Teacher materials lack strategies to help English learner students understand the mathematics content and practices that are tied to the *Mathematics Framework*.
* Criterion 4.5: IM 1, ELD Support, SEN Support, At Home and in the Community: PGM1TE pp. 127–130. Teacher materials lack strategies to help English learner students understand the mathematics content and practices that are tied to the *Mathematics Framework*.
* Criterion 4.6: IM 1, Mechanics: PGM1TE pp. 1–26. Above-grade-level content standards are interleaved with on-grade-level content. The program does not provide grade-level material experienced at a greater depth.
* Criterion 4.7: IM 1, PGM1SE pp. 4, 5. Visual design of material distracts from the mathematics, and the narrative is improperly spaced and does not support students in engaging thoughtfully with the subject.

### Criteria Category 5: Instructional Planning and Support

The instructional materials do not contain a clear road map to assist teachers when planning instruction for the specific needs and context of their students. The instructional resources do not support Universal Design for Learning and culturally and linguistically responsive instruction to improve and optimize teaching and make learning more equitable.

#### Citations:

* Criterion 5.1: IM 1, Vertical Math Plan (online only) <https://www.tpspublishing.com/my-resources/index.php?menu=1240&resource=6031&page=1#page=2> There is no evidence that the teacher’s edition explains the role of the grade-level mathematics within the context of K–12 education.
* Criterion 5.2: IM 1, Projects: PGM1TE vi–xiii. The program does not meet the requirement for providing teacher guidance.
* Criterion 5.5: IM 1, Why are two variables Related?: PGM1TE p. 88. “Answers may vary” is not sufficient support for how student responses or answers could appear.
* Criterion 5.6: IM 1, Didax Working With The Geoboard - Use of Manipulatives: DIGB pp. 60–69. The program does not include clear instructions in the use of digital manipulatives for teachers and students.
* Criterion 5.8: IM 1, Example Student Reflection: PGM1TE pp. 16–17. The program does not include examples of student work and representation of possible student strategies and does not help teachers elicit, make sense of, and respond to student thinking.
* Criterion 5.9: IM 1, Projects – Cognates listing: p. 362. The program does not meet the requirement to support students in developing the language skills needed to meet mathematical learning objectives.

## Edits and Corrections:

None

## Social Content Citations

None

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