

High School Mathematics Evidence Guides

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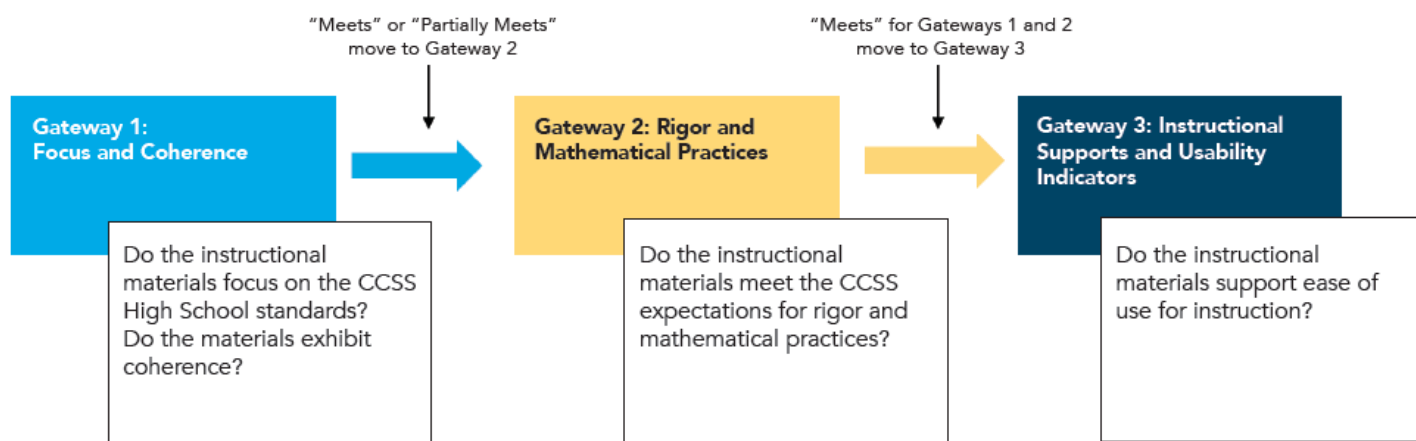
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SECTION 1: The Quality Instructional Materials Review Process: High School Mathematics

The High School Quality Instructional Materials Mathematics Review Tool identifies the criteria and indicators for high quality instructional materials. The High School Evidence Guides complement the High School Quality Instructional Materials Review Tool by elaborating details for each indicator including the purpose of the indicator, information on how to collect evidence, guiding questions and discussion prompts, and scoring criteria.

The EdReports.org High School Quality Instructional Materials Review Tool supports a sequential review process through three gateways that reflect the importance of alignment to the fundamental design elements of the standards and then considers other high-quality attributes of curriculum as recommended by educators.



The Instructional Materials Review and Report is completed by Educator-Led Review teams who know that when materials enter a classroom, teachers are looking for two key features:



First, is the instructional material aligned to the standards? Are all non-plus standards present and treated with appropriate depth and quality required to support students?



Second, are the instructional materials usable for students and educators?

High School Mathematics Evidence Guides: Overview

The High School Mathematics Evidence Guides are designed to support cluster review teams to have a shared understanding of the criterion and indicators for each of the three Gateways. The Evidence Guides are just what they say they are: Guides. They are not exhaustive of all the evidence that could illustrate a specific indicator, nor are they a list of evidence that must be present for instructional materials to meet the expectations of an indicator. The Instructional Materials Review Tool, supported by the Evidence Guides, provide the framework for educator-led reviews.

Gateway 1: Focus and Coherence

Focus and Coherence identify the alignment of instructional materials to the Standards for Mathematical Content, and determine whether the progression of these standards is coherent both within the courses and to prior and future courses.

Focus and Coherence indicators examine if the materials focus on “the high school standards that specify the mathematics which all students should study in order to be college and career ready” (p. 57 of CCSSM) and exhibit coherence within and across courses that is consistent with a logical structure of mathematics.

Instructional materials that meet or partially meet the expectations for Gateway 1 will be reviewed in Gateway 2.

Gateway 2: Rigor and Mathematical Practices

Rigor and the Mathematical Practices identify how well the instructional materials reflect the balance of conceptual understanding, procedural skills, and application; and the alignment of instructional materials to the Standards for Mathematical Practices.

Rigor indicators identify how well instructional materials for the series reflect the balances in the standards and help students meet the standards’ rigorous expectations for developing conceptual understanding, procedural skills, application, and reflect the the balance of the Standards.

Mathematical Practice indicators identify how well instructional materials for the series meaningfully connect the Standards for Mathematical Practice to the Standards for Mathematical Content and whether the full intent of each Mathematical Practice Standard is met for the series.

Instructional materials that meet expectations for Gateway 1 and Gateway 2 will be reviewed in Gateway 3.

Gateway 3: Instructional Supports and Usability

The Instructional Supports and Usability indicators determine how well instructional materials support student learning and engagement and support teacher learning and understanding of the standards. Indicators include usability of assessments, supports for special populations and English Language Learners, and incorporation of technology into the instructional materials. Only materials that meet the expectations for gateways 1 and 2 are reviewed for Instructional Supports and Usability (Gateway 3).

Protocol for Scoring

Score = Rationale + Evidence for each indicator. Educator-led review teams, typically consisting of five members, meet weekly to discuss evidence collected independently. During these weekly meetings, reviewers discuss evidence and reach consensus on the rationale and score. The evidence collected is used to support the rationale and the score. Scores are comprised of specific criteria that is in the report. Instructional materials can meet, partially meet, or not meet the expectation for an indicator, although there are some indicators in the Quality Instructional Materials Review Tool that are reported on but are unscored.



Meets Expectations. A score of meets expectations means that the instructional materials clearly and compellingly support the given indicator. The final report contains a rationale describing how the instructional materials meet expectations and is supported by evidence from the materials. In some cases, evidence where the full intent of the indicator is not met may be identified if the evidence does not affect scoring.



Partially Meets Expectations. A score of partially meets expectations means that there are elements within the instructional materials that support the given indicator and elements that do not. In this case, the final report contains two rationales, one describing where the instructional materials meet expectations and one describing where the instructional materials do not meet expectations, both with compelling evidence.



Does Not Meet Expectations. A score of does not meet expectations means that the instructional materials do not contain clear and compelling support for the indicator. The final report provides a rationale that clearly articulates why the materials do not meet the indicator and is supported by evidence from the materials. In some cases, there may be places where the instructional materials demonstrate aspects of the indicator.



No Rating. There are some indicators that are reported upon but unscored.

Professional judgment is one of the reasons educator-led review teams form the working group for all instructional materials reviews and reports. Reviewers are educators who work daily with instructional materials, and understand the impact instructional materials have on their practice and their importance for student learning. Their wealth of knowledge and experience is at the core of the EdReports.org Instructional Materials Review Report.

SECTION 2: Components of the High School Instructional Materials Evidence Guides

The High School Quality Instructional Materials Evidence Guides are designed to help reviewers both independently and within their cluster team meetings identify the rationale and evidence to support a score for each indicator. They mirror and support the High School Quality Instructional Materials Review Tool and are structured in a specific way to guide the review process.



The Guiding Questions(s) frame the evidence collection



The Purpose of the Indicator contextualizes the indicator within the criterion as well as how indicators work together to build a complete picture for the criterion.



Evidence Collection provides support to reviewers for finding evidence, and when appropriate, provides examples and counterexamples of evidence for an indicator.



Questions to Guide Discussion/Discussion Prompts help reviewers prepare for their weekly meeting where they present their rationale and evidence for a given indicator.



The Scoring Criteria defines what must be present in the rationale and evidence to support each level of score for a given indicator.

SECTION 3:

Gateway 1 Focus and Coherence Evidence Guides

Focus and Coherence identify the alignment of instructional materials to the Standards for Mathematical Content, and determine whether the progression of these standards is coherent both within the courses and to prior and future courses.

Focus and Coherence indicators examine if the materials focus on “the high school standards that specify the mathematics which all students should study in order to be college and career ready” (p. 57 of CCSSM) and exhibit coherence within and across courses that is consistent with a logical structure of mathematics.

Indicator 1f is a non-scored indicator that examines if the plus (+) standards are explicitly identified and coherently support the mathematics addressed in the non-plus standards.

[GATEWAY 1 Evidence Guides](#)

SECTION 4:

Gateway 2 Rigor and Mathematical Practices Evidence Guides

Rigor and the Mathematical Practices identify the alignment of instructional materials to the Standards for Mathematical Practice and how well they reflect the balance of conceptual understanding, procedural skill, and application.

Rigor indicators identify how well the instructional materials for the series reflect the balances in the standards and help students meet the standards' rigorous expectations for developing conceptual understanding, procedural skills, and application.

Mathematical Practice indicators identify how well instructional materials for the series meaningfully connect the Standards for Mathematical Practice to the Standards for Mathematical Content and whether the full intent of each Mathematical Practice Standard is met for the series.

[GATEWAY 2 Evidence Guides](#)

SECTION 5:

Gateway 3: Instructional Support Usability Indicators

Instructional materials that meet the expectations for both Gateways 1 and 2, undergo a Gateway 3 review. Gateway 3 focuses on how well the instructional materials support student learning and engagement, teacher learning and understanding of the Standards, how to differentiate instruction for diverse learners and enrich instruction through technology. There are four scored criteria and one non-scored criterion. For 'Effective Technology Use,' indicators are not rated but evidence is still collected to be included in the review. EdReports.org considers technology use to be an important element of usability, but since printed and online materials vary widely in their use of technology we are not scoring these indicators at this time.

[GATEWAY 3 Evidence Guides](#)