The Mississippi High Quality Instructional Materials Mathematics Review Rubric (HQIM²R²)

Textbook Publisher’s Orientation

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Mississippi Department of Education

VISION
To create a world-class educational system that gives students the knowledge and skills to be successful in college and the workforce, and to flourish as parents and citizens

MISSION
To provide leadership through the development of policy and accountability systems so that all students are prepared to compete in the global community
MISSISSIPPI STATE BOARD OF EDUCATION

STRATEGIC PLAN GOALS

1. All Students Proficient and Showing Growth in All Assessed Areas
2. Every Student Graduates from High School and is Ready for College and Career
3. Every Child Has Access to a High-Quality Early Childhood Program
4. Every School Has Effective Teachers and Leaders
5. Every Community Effectively Uses a World-Class Data System to Improve Student Outcomes
6. Every School and District is Rated “C” or Higher

Our Goal & Our Partnership

To increase the capacity of teachers, administrators, and leaders to seek, identify, and demand the highest-quality instructional materials.

MISSISSIPPI DEPARTMENT OF EDUCATION

edreports.org
The Mississippi High Quality Instructional Materials Mathematics Review Rubric (HQIM$^2$R$^2$) K-8 identifies the criteria and indicators for high quality instructional materials.

The HQIM$^2$R$^2$ is complemented by Evidence Guides that support the identification of evidence, and scoring criteria.

The HQIM$^2$R$^2$ 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 Review Process

1. Review indicators for Gateway 1.
   ★ If instructional materials meet or partially meet expectations for Gateway 1, move to step 2.

2. Review indicators for Gateway 2.
   ★ If instructional materials meet expectations for both Gateways 1 and 2, move to step 3.


Gateway 1 - Focus & Coherence

• **Focus** indicators determine whether instructional materials assess the appropriate grade-level content and spend the majority of class time on the major clusters of each grade.

• **Coherence** indicators determine whether instructional materials attend to supporting work to enhance focus, are viable for one year, are consistent with the progressions of the standards, and are coherent within a single grade.
Gateway 2 – Rigor & the Mathematical Practices

- **Rigor** indicators determine if each grade’s instructional materials reflect the balances in the standards by helping students develop conceptual understanding, procedural skill and fluency, and application.

- The **Mathematical Practice** indicators determine how well materials meaningfully connect the Standards for Mathematical Content and the Standards for Mathematical Practice.

Gateway 3 – Rating Sheets

- **Rating Sheet 1:** Use and design to facilitate student learning
- **Rating Sheet 2:** Teacher planning and learning for success with MS - CCR Standards
- **Rating Sheet 3:** Assessment
- **Rating Sheet 4:** Differentiation, scaffolding, and supports for all learners
- **Rating Sheet 5:** Effective use of technology
- **Rating Sheet 6:** Supplemental Materials
Materials with an EdReports.org Review

Review Teams will:

• Use the existing reports at www.edreports.org

• Review MS-specific (NEW) Indicators 3ei, 3piii, 3piv, and Rating Sheet 6 - Supplemental Materials

HQIM$^2$R$^2$ Protocol for MS-Specific (New) Indicators

Indicators:

• 3ei. The materials incorporate a glossary, footnotes, recording, pictures, and/or other features that aid students and teachers in using the book effectively.

• 3piii. The assessment materials include embedded assessments that reflect a variety of knowledge levels.

• 3piv. Multiple types of formative and summative assessments (performance based tasks, questions, research, investigations, and projects) are embedded into the content materials and assess the learning targets.

• Rating Sheet 6. Supplemental materials reinforce core instruction and provide ample and a variety of resources to support student learning.
High Quality Instructional Materials Math Review Rubric (HQIM®)

Subject: Mathematics K-8
Evaluator: __________________________
Rating Committee: __________________

Title of Textbook Series/Instructional Program: __________________________
Grade Range of Textbook Series/Instructional Program: __________
Specific Grade Evaluated: __________________________

Mississippi defines High-Quality Instructional Materials (HQIM) as materials that are aligned with the Mississippi College- and Career-Readiness Standards, externally validated, comprehensive, and include engaging texts, which include books both digital and print and multimedia material, rigorous problems, and aligned assessments. HQIM can be used to identify students’ areas of strength and opportunities for growth and are sequentially mapped and designed to prepare students to graduate ready for college and the workforce, educative for teachers, and accessible to students with differentiated needs.

The High-Quality Instructional Materials Mathematics Review Rubric K-8

The High-Quality Instructional Materials Mathematics Review Rubric K-8 (HQIM®) identifies the criteria and indicators for high quality instructional materials. The K-8 Evidence Guides complement the K-8 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 HQIM® is comprised of three sections:

- Section 1: Alignment to Standards, Learning Progressions, and Coherence - This is a requirement for submission.
- Section 2: Alignment to Rigor, and the Standards for Mathematical Practice - This is a requirement for submission.
- Section 3: Usability and Design of Materials

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HQIM® Section 1: Alignment to Standards, Learning Progressions, and Coherence - This is a requirement for submission.

- Criterion 1.1: Alignment and Accuracy - How well do the instructional materials align to the Standards for Mathematical Content?
- Criterion 1.2: Learning Progressions and Coherence - How well do the instructional materials attend to the learning progressions emphasized in the standards, so that the curriculum is coherent both within grades and across grade bands?

HQIM® Section 2: Alignment to Rigor and The Standards for Mathematical Practices - This is a requirement for submission

- Criterion 2.a - 2.d: Rigor - Are all aspects of rigor (conceptual understanding, procedural skill and fluency, application, and balance across all three) attended to in the instructional materials?
- Criterion 2.e - 2.g(ii): Standards for Mathematical Practice - Are the Standards for Mathematical Practice addressed so that students have opportunities to demonstrate independent mastery of these standards?

HQIM® Section 3: Instructional Support, Usability, and Assessment

- Criterion 3.1 Use and Design to facilitate student learning - Are materials well designed and take into account effective lesson structure and pacing?
- Criterion 3.2 Teacher Planning and Learning for Success with the Mississippi College and Career Ready Standards - Do materials support teacher planning, learning, and understanding of the Standards? Do materials provide teachers with guidance to build their own knowledge of mathematics and to give all students extensive opportunities and support to explore key concepts?
- Criterion 3.3 Assessment - Do materials offer assessment opportunities that genuinely measure progress and elicit direct, observable evidence of the degree to which students can independently demonstrate the assessed standards?
- Criterion 3.4 Differentiation, Scaffold, and Supports for all Learners - Do materials give all students extensive opportunities and support to explore key concepts?
- Criterion 3.5 Effective use of technology - Do materials support effective use of technology to enhance student learning? Are digital materials accessible and available in multiple platforms?
- Criterion 3.6 Supplemental Materials - Do supplemental materials reinforce core instruction and provide ample and a variety of resources to support student learning?
The State Textbook Review Committee Process will include Evidence Guides

The K-8 Mathematics Evidence Guides are designed to support review teams to have a shared understanding of the criterion and indicators for each of the three Gateways.

High School Reviews

- Part of the Mississippi Educators High School Review process will be to identify whether the instructional materials align to the HS course objectives/standards using a similar tool (as developed by EdReports)
- There are substantive differences in Gateways 1 and 2 between the K-8 tool and the High School tool
- EdReports.org’s High School tool and evidence guides are designed to look at a complete series across HS courses regardless of how they are delivered (traditional Algebra/Geometry/Algebra2, or in an integrated approach).
### Gateway 1 – Focus & Coherence

**Overall Gateway 1 Rating: Focus and Coherence**
- Reviewers should use data recorded in Rating Sheet 1 to determine the Gateway 1 final rating.

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>RATING SCORE</th>
<th>EVIDENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GATEWAY 1: FOCUS AND COHERENCE:</strong> The instructional materials are coherent and consistent with “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).</td>
<td>1a-1e. The instructional materials are coherent and consistent with “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).</td>
<td>Point Totals from Rating Sheet(s):</td>
</tr>
<tr>
<td>Earned: ____ of 18 points</td>
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- Meets expectations (16-18 points)                                        |                                                                                |                                                                                               |
- Partially meets expectations (10-15 points)                              |                                                                                |                                                                                               |
- Does not meet expectations (<10 points)                                  |                                                                                |                                                                                               |

*Materials must meet expectations or partially meet expectations for Gateway 1 to move on to Gateway 2.*

### Gateway 2 – Rigor & Mathematical Practices

**Overall Gateway 2 Rating: Rigor and Mathematical Practices**
- Reviewers should use data recorded in Rating Sheets 1 and 2 to determine the Gateway 2 final rating.

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>RATING SCORE</th>
<th>EVIDENCE</th>
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</thead>
<tbody>
<tr>
<td><strong>GATEWAY 2: RIGOR AND MATHEMATICAL PRACTICES:</strong> The materials align with CCSS expectations for rigor and mathematical practices. Earned: ____ of 16 points</td>
<td>2a-2d. The instructional materials reflect the balances in the Standards and help students meet the Standards’ rigorous expectations, by helping students develop conceptual understanding, procedural skill and fluency, and application.</td>
<td>Point Totals from Rating Sheet(s):</td>
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</table>
- Meets expectations (14-16 points)                                        |                                                                                |                                                                                               |
- Partially meets expectations (10-13 points)                              |                                                                                |                                                                                               |
- Does not meet expectations (<10 points)                                  |                                                                                |                                                                                               |

*Materials must meet expectations for Gateway 1 and Gateway 2 to move on to Gateway 3.*
# Gateway 3 – Instructional Supports & Usability

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>RATING</th>
<th>EVIDENCE</th>
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</thead>
<tbody>
<tr>
<td>Gateway 3: Instructional Supports and Usability Indicators:</td>
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<tr>
<td>Materials support student learning and engagement and support teacher</td>
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<tr>
<td>learning and understanding of the Standards. Materials also offer supports</td>
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<td></td>
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<td>to differentiate instruction for diverse learners and enrich instruction</td>
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<td></td>
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<td>through technology.</td>
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<td>Earned: _____ of 36 points</td>
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<tr>
<td>Meets expectations (30-36 points)</td>
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<td>Partially meets expectations (22-29 points)</td>
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<tr>
<td>Does not meet expectations (-22 points)</td>
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<td></td>
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<tr>
<td>3a-3b. Materials are well designed and take into account effective</td>
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<td></td>
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<tr>
<td>lesson structure and pacing to facilitate student learning.</td>
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<tr>
<td>Point Totals from Ratings Sheet(s):</td>
<td></td>
<td></td>
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<tr>
<td>3f-3j. Materials support teacher learning and understanding of the</td>
<td></td>
<td></td>
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<tr>
<td>Standards.</td>
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<td></td>
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<tr>
<td>Point Totals from Ratings Sheet(s):</td>
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<td></td>
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<tr>
<td>3m-3q. Materials offer teachers resources and tools to collect ongoing</td>
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<tr>
<td>data about student progress on the Standards.</td>
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<tr>
<td>Point Totals from Ratings Sheet(s):</td>
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<td></td>
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<tr>
<td>3r-3y. Materials support teachers in differentiating instruction for</td>
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<td>diverse learners within and across grades.</td>
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<tr>
<td>Point Totals from Ratings Sheet(s):</td>
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<td></td>
</tr>
<tr>
<td>3e-3ad. Materials support effective use of technology to enhance</td>
<td></td>
<td>Unrated</td>
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<tr>
<td>student learning.</td>
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