



Please introduce yourself in the chat by sharing your role/organization and your favorite fall activity.



HQIM Connections to the Ohio Learning Standards

Statewide Webinar
October 13, 2022

Welcome & Introductions



Sherry Birchem
Director
Office of Learning and
Instructional Strategies



Kerry Martinez
Assistant Director
Office of Learning and
Instructional Strategies



Teresa Castellaneta
HQIM Specialist
Office of Learning and
Instructional Strategies



Jessica Faith Carter
Senior Specialist, Field
Services

Today's Objectives

Participants will:

- Gain an understanding of the importance of standards alignment when choosing instructional materials
- Explore characteristics of standards-aligned instructional materials and build skills to become critical consumers of instructional materials

Agenda

1	Welcome
2	The Importance of Standards Alignment
3	Characteristics of Standards-Aligned High-Quality Instructional Materials
4	Helpful Resources
5	Closing & Next Steps

Virtual Norms

- When in large groups, please use your mute button to help provide a distraction-free experience
- When in breakout groups, please unmute so that you can engage in conversation
- Videos on make for the best interaction

The Importance of Standards Alignment



Standards & Instructional Materials

- Standards indicate what students should know and be able to do within a particular content area
- Instructional materials shape how students will gain the knowledge, skills, and abilities as described in the standards

Ohio's Learning Standards...

- Explain the knowledge and skills Ohio students should know and be able to do in pre-kindergarten through grade 12
- Emphasize skills like critical thinking and problem solving
- Instill life-long learning by providing essential knowledge and skills

Alignment of Instructional Materials

- Alignment is the process of ensuring that instructional materials enables students to reach the milestones that are represented by the Ohio Learning Standards
- Aligned materials provide students with the opportunity to access the content and skills outline in the Ohio Learning Standards

Standards Alignment and Selecting HQIMs

- Selection teams and teachers benefit from training on how to look for alignment to the learning standards in materials
- It's unlikely that a set of materials will perfectly align to all standards, and that's okay
- Standards alignment shouldn't be the only “look for” when selecting materials
 - Remember to factor in local priorities and other essential features

Why Standards Alignment?

When instructional materials are aligned to standards, variability in the content and quality of instruction decreases and student achievement increases



Stop & Think

Discuss the questions below in your breakout room:

- What do you see as the greatest benefit of using standards-aligned high-quality instructional materials?
- What challenges have you faced when seeking standards-aligned high-quality instructional materials? What supports would be helpful to address these challenges?

Add your thoughts to the [note-catcher](#).

Characteristics of Standards-Aligned High-Quality Instructional Materials



Standards-Aligned High-Quality Instructional Materials...



Opportunities for Connection

**Quality materials offer
opportunities for teachers
to connect students and
their families, communities,
and cultures.**

Christopher Soldat
Science Curriculum Consultant, IA



Integrating Students' Prior Knowledge

In my classrooms, I use prompts which encourage students to share with each other about how the topics we're discussing relate back to their lives. Quality tasks and materials integrate what the students bring to the table into the common concept we teach.

Sharla Dowding EdD
Director of Field Experiences
Black Hills State University, SD



Accessibility

**Quality materials are
accessible to all students,
provide flexibility to make
adjustments, and support
teachers to instill a love of
learning and engagement.**

Trish Pulos
Academic Dean
North Valley Military Institute, CA



Promoting Student Engagement

Student discourse matters for engagement and ultimately student learning. Quality materials can help by prompting teachers to sample student responses and providing guidance on how to handle student input in a way that encourages exploration.

Marisa Miller
Assistant Director of Science
Mastery Schools, PA





Stop & Think

Reflect on the question below:

- What characteristics come to mind when you think about standards-aligned high-quality instructional materials?

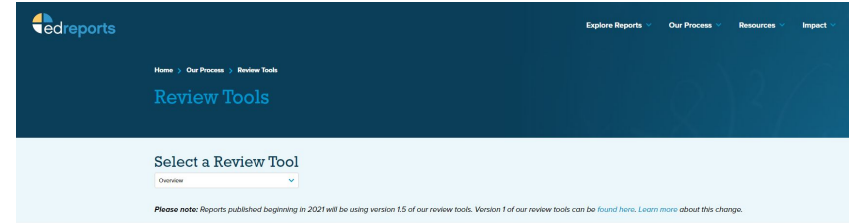
Drop your responses in the chat.

Helpful Resources



EdReports Review Tools

- Overview of Terms
- Rubrics
- Guidance Documents



Ohio-specific rubrics and tools will be shared in 2023.

Connections to Ohio Learning Standards - ELA

OHIO'S LEARNING STANDARDS | ENGLISH LANGUAGE ARTS | ADOPTED 2017

GRADE 6 STUDENTS:

COMPREHENSION AND COLLABORATION

SL.6.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on *grade 6 topics, texts, and issues*, building on others' ideas and expressing their own clearly.

- a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.
- b. Follow rules for collegial discussions, set specific goals and deadlines, and define individual roles as needed.
- c. Pose and respond to specific questions with elaboration and detail by making comments that contribute to the topic, text, or issue under discussion.
- d. Review the key ideas expressed and demonstrate understanding of multiple perspectives through reflection and paraphrasing.

GRADE 7 STUDENTS:

SL.7.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on *grade 7 topics, texts, and issues*, building on others' ideas and expressing their own clearly.

- a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.
- b. Follow rules for collegial discussions, set progress toward specific goals and deadlines, and define individual roles as needed.
- c. Pose questions that elicit elaboration and respond to others' questions and comments with relevant observations and ideas that bring the discussion back on topic as needed.
- d. Acknowledge new information expressed by others and, when warranted, modify their own views.

GRADE 8 STUDENTS:

SL.8.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on *grade 8 topics, texts, and issues*, building on others' ideas and expressing their own clearly.

- a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.
- b. Follow rules for collegial discussions and decision-making, track progress toward specific goals and deadlines, and define individual roles as needed.
- c. Pose questions that connect the ideas of several speakers and respond to others' questions and comments with relevant evidence, observations, and ideas.
- d. Acknowledge new information expressed by others and, when warranted, qualify or justify their own views in light of the evidence presented.

3-8 ELA Review Criteria & Evidence Guide

► Criterion 1.2: Alignment to the Standards with Tasks and Questions Grounded in Evidence

Materials provide opportunities for rich and rigorous evidence-based discussions and writing about texts to build strong literacy skills.

Indicators	Scoring		
1f. Most questions, tasks, and assignments are text-specific and/or text-dependent, requiring students to engage with the text directly (drawing on textual evidence to support both what is explicit as well as valid inferences from the text).	0	1	2
1g. Materials provide frequent opportunities and protocols for evidence-based discussions.	0	1	2
1h. Materials support students' listening and speaking about what they are reading and researching (including presentation opportunities) with relevant follow-up questions and evidence.	0	1	2
1i. Materials include a mix of on-demand and process writing (e.g., multiple drafts, revisions over time) and short, focused projects, incorporating digital resources where appropriate.	0	1	2
1j. Materials provide opportunities for students to address different text types of writing that reflect the distribution required by the standards.	0	1	2
1k. Materials include frequent opportunities for evidence-based writing to support careful analyses, well-defended claims, and clear information.	0	1	2
1l. Materials include explicit instruction of the grade-level grammar and usage standards, with opportunities for application in context.	0	1	2
1m. Materials include a cohesive, year-long plan for students to interact with and build key academic vocabulary in and across texts.	0	1	2
	0	2	4
		(Grades 3-5)	(Grades 6-8)

Text Quality and Complexity and Alignment to the Standards with Tasks and Questions Grounded in Evidence

Criterion 1.2

Alignment to the Standards with Tasks and Questions Grounded in Evidence

Materials provide opportunities for rich and rigorous evidence-based discussions and writing about texts to build strong literacy skills.

What is the purpose of this Criterion?

This criterion addresses the importance of text-specific and/or text-dependent questions and tasks. Students should be provided opportunities to respond to text-based questions and tasks both in discussion and in writing. Questions and tasks grounded in the text require students to use information from the text to support their answers and demonstrate comprehension of what they are reading or listening to.

Research Connection

"Through text-based questions and discussion, students are guided to deeply analyze and appreciate various aspects of the text, such as key vocabulary and how its meaning is shaped by context; attention to form, tone, imagery and/or rhetorical devices; the significance of word choice and syntax; and the discovery of different levels of meaning as passages are read multiple times" (Brown & Kappes, 2012, p. 2).

Connections to Ohio Learning Standards - Science

OHIO'S LEARNING STANDARDS AND MODEL CURRICULUM | SCIENCE |

GUIDING PRINCIPLES

Ohio's Learning Standards and Model Curriculum for Science has been informed by international and national studies, education stakeholders and academic content experts. The guiding principles include:

- **Definition of Science:** Scientific knowledge is logical, predictive and testable, and expands and advances as new evidence is discovered. Science is a process of continuing investigation, based on observation, scientific hypothesis testing, measurement, experimentation and theory building which leads to explanations of natural phenomena, processes or objects that are open to further testing and revision based on evidence.
- **Scientific and Engineering Practices:**
 1. Asking questions (for science) and defining problems (for engineering)
 2. Developing and using models
 3. Planning and carrying out investigations
 4. Analyzing and interpreting data
 5. Using mathematics and computational thinking
 6. Constructing explanations (for science) and designing solutions (for engineering)
 7. Engaging in argument from evidence
 8. Obtaining, evaluating, and communicating information³

K-5 Science Review Criteria & Evidence Guides

► Criterion 2.1: Coherence and Scope

Materials are coherent in design, scientifically accurate, and support grade-band endpoints of all three dimensions.

Indicator	Points
2a. Materials are designed for students to build and connect their knowledge and use of the three dimensions across the series.	
i. Students understand how the materials connect the dimensions from unit to unit.	0 1 2
ii. Materials have an intentional sequence where student tasks increase in sophistication.	0 1 2
2b. Materials present Disciplinary Core Ideas (DCI), Science and Engineering Practices (SEP), and Crosscutting Concepts (CCC) in a way that is scientifically accurate.*	0 1 2
2c. Materials do not inappropriately include scientific content and ideas outside of the grade-level Disciplinary Core Ideas.*	0 1 2
2d. Materials incorporate all grade-level Disciplinary Core Ideas.	
i. Physical Sciences	0 1 2
ii. Life Sciences	0 1 2
iii. Earth and Space Sciences	0 1 2
iv. Engineering, Technology, and Applications of Science	0 1 2
2e. Materials incorporate all grade-level Science and Engineering Practices.	
i. Materials incorporate grade-level appropriate SEPs within each grade.	0 2 4
ii. Materials incorporate all SEPs across the grade band.	0 2 4

Gateway 2: Coherence & Scope

Criterion 2.1

Coherence and Full Scope of the Three Dimensions

Materials are coherent in design, scientifically accurate, and support grade-band endpoints of all three dimensions.

What is the purpose of this Criterion?

"The Framework's vision is that students will acquire knowledge and skill in science and engineering through a carefully designed sequence of learning experiences. Each stage in the sequence will develop students' understanding of particular scientific and engineering practices, crosscutting concepts, and disciplinary core ideas while also deepening their insights into the ways in which people from all backgrounds engage in scientific and engineering work to satisfy their curiosity, seek explanations about the world, and improve the built world." (A Framework for K-12 Science Education, p. 247)

"A major goal for NGSS-designed science education is for students to be able to develop their understanding of the DCIs by engaging in the SEPs and applying the CCCs. These three dimensions are tools that students can acquire and use to answer questions about the world around them and to solve design problems." ([2015 Achieve NGSS Innovations](#))

Connections to Ohio Learning Standards - Math

OHIO'S LEARNING STANDARDS | Mathematics | 2017

83

GEOMETRIC MEASUREMENT AND DIMENSION

G.GMD

Explain volume formulas, and use them to solve problems.

G.GMD.1 Give an informal argument for the formulas for the circumference of a circle, area of a circle, and volume of a cylinder, pyramid, and cone. *Use dissection arguments, Cavalieri's principle, and informal limit arguments.*

(+) **G.GMD.2** Give an informal argument using Cavalieri's principle for the formulas for the volume of a sphere and other solid figures.

G.GMD.3 Use volume formulas for cylinders, pyramids, cones, and spheres to solve problems.★

Visualize relationships between two-dimensional and three-dimensional objects.

G.GMD.4 Identify the shapes of two-dimensional cross-sections of three-dimensional objects, and identify three-dimensional objects generated by rotations of two-dimensional objects.

Understand the relationships between lengths, areas, and volumes.

G.GMD.5 Understand how and when changes to the measures of a figure (lengths or angles) result in similar and non-similar figures.

G.GMD.6 When figures are similar, understand and apply the fact that when a figure is scaled by a factor of k , the effect on lengths, areas, and volumes is that they are multiplied by k , k^2 , and k^3 , respectively.

MODELING WITH GEOMETRY

G.MG

Apply geometric concepts in modeling situations.

G.MG.1 Use geometric shapes, their measures, and their properties to describe objects, e.g., modeling a tree trunk or a human torso as a cylinder.★

G.MG.2 Apply concepts of density based on area and volume in modeling situations, e.g., persons per square mile, BTUs per cubic foot.★

G.MG.3 Apply geometric methods to solve design problems, e.g., designing an object or structure to satisfy physical constraints or minimize cost; working with typographic grid systems based on ratios.★

High School Math Review Criteria & Evidence Guide

► Criterion 2.2: Practice-Content Connections

Materials meaningfully connect the Standards for Mathematical Content and Standards for Mathematical Practice (MPs).

Indicators	Scoring		
2e. Materials support the intentional development of overarching, mathematical practices (MPs 1 and 6), in connection to the high school content standards, as required by the mathematical practice standards.	0	1	2
2f. Materials support the intentional development of reasoning and explaining (MPs 2 and 3), in connection to the high school content standards, as required by the mathematical practice standards.	0	1	2
2g. Materials support the intentional development of modeling and using tools (MPs 4 and 5), in connection to the high school content standards, as required by the mathematical practice standards.	0	1	2
2h. Materials support the intentional development of seeing structure and generalizing (MPs 7 and 8), in connection to the high school content standards, as required by the mathematical practice standards.	0	1	2

Indicator 2g Guiding Question:

Across the series, are MP4 and MP5 used to enrich the mathematical content?

Across the series, is there intentional development of MP4 and MP5 that reaches the full intent of the MPs?

Evidence Collection

Note: If all aspects of the modeling cycle are present in the materials, then the materials meet the full intent of MP4.

Look at all lessons in teacher's manuals and in the student materials to ensure that MP4 and MP5 are occurring throughout the courses.

Look in unit overviews, scope and sequence charts, and/or other instructional guides to ensure that MP4 and MP5 are occurring throughout the courses of the series.

Record any instances where MP4 and MP5 are misidentified in the curricular materials (e.g. a lesson is marked as aligned to an MP when only a small part addresses that, or vice versa).

To check that MP4 and MP5 are being used to enrich the mathematics content and

Look at lessons, assessments and any examples/descriptions of anticipated student work. Look for places that require students to:

- engage in the modeling cycle (MP4)
- apply prior knowledge to new problems
- identify important relationships and map relationships with tables, diagrams, graphs, rules, etc.
- draw conclusions from solutions as they pertain to a situation
- **choose appropriate tools (MP5)**
- use multiple tools to represent information in a situation

Why Materials Matter Info Sheet

- Links to Research on the Importance of HQIM
- Reflection Questions
- Links to HQIM Resources

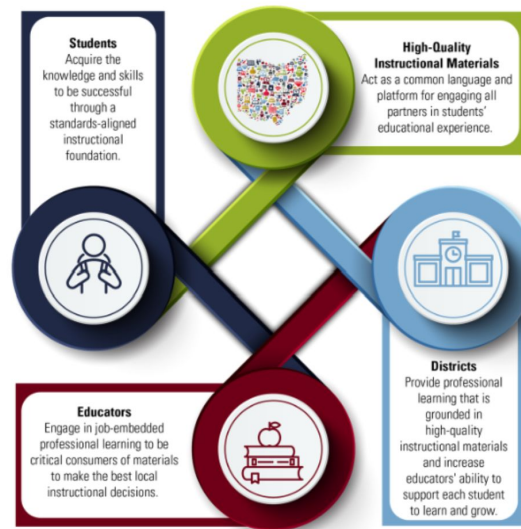
Why Materials Matter for Ohio Students

In Ohio, we believe that access to high-quality instructional materials is critical for equity and ensures that each student acquires the knowledge and skills to be successful through a standards-aligned instructional foundation. Research has found that stronger student learning occurs when educators engage in job-embedded, sustained professional learning that is grounded in quality content. High-quality instructional materials act as a common language and platform for engaging all partners in students' educational experience.

Access to Quality Matters for Student Success

At the Ohio Department of Education, we want to support teachers to ensure they have access to grade-level appropriate materials to meet the needs of all students.

[Research](#) has shown that when students have inconsistent access to high-quality content, there is a significant impact on their learning. The average student spends approximately 75% of their available school hours on assignments that are not high quality. This is particularly significant for students of color and students living in poverty who have less access to high-quality, standards-aligned materials than their peers.



Closing & Next Steps





Stop and Think

- What are you most **excited** about?
- What are you **taking away** from this session?
- What do you **hope to learn** more about in the future?

Statewide Webinar Dates

Topic	Date
HQIM Connections to the Ohio Learning Standards	10/13/22
Supporting Teachers with HQIM	11/10/22
Best Practices in Reviewing, Selecting, and Implementing HQIM	12/15/22
Math Rubric & Guidance Documents	2/9/23
Non-Core Rubric & Guidance Documents	3/9/23
Stakeholder Engagement and HQIM	4/6/23
Science Rubric & Guidance Documents	5/11/23
ELA Rubric & Guidance Documents	6/15/23

Next Steps

- Register for upcoming webinars
- Reach out and share feedback and ways we can support
- Connect with your local ESCs for additional support
- Complete today's [exit ticket](#)

High-Quality Instructional Materials Questions (HQIM)

ohmaterialsmatter@education.ohio.gov

Visit education.ohio.gov

Keyword Search: *Ohio Materials Matter*

Reach out to EdReports with questions

jcarter@edreports.org

