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Gold Standard Project Based Learning designed as HQIM

The **driving question** for this brief revolves around a question at top of mind for school and district leaders who support a diverse population of teachers in their efforts to provide rigorous, grade-level-appropriate, and engaging instruction for their students. What resources and materials do teachers need to plan effectively and efficiently? How do we know those resources are high quality? **What are HQIM and how do Gold Standard Project Based Units fit the criteria?**

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The realities of the K–12 landscape post-COVID are challenging and complex for educators and students. Declines in school enrollment, attendance, and engagement persist. Lower college and workforce readiness rates have been documented, with declines greater for underserved populations of students.^{1,2} At the same time, teacher recruitment and retention are increasingly challenging. Since the 1980s, the number of teachers leaving the profession has steadily increased, with approximately 16% leaving in the 2021–2022 school year.³ In 2024, an estimated 13% of teaching positions remained vacant or were filled by teachers not fully certified for their current teaching roles.⁴ These shifts in the K–12 landscape highlight the need for accessible, high-quality instructional materials with embedded teacher support to ensure all students have access to rigorous and authentic learning experiences.

The Problem: Access to High-Quality Instructional Materials

When teachers utilize high-quality instructional materials (HQIM) and receive professional support, their students have stronger student learning outcomes. The gains in student learning outcomes are even more significant for less experienced teachers.⁵ However, teachers report that accessing HQIM can be challenging and time consuming. Teachers spend an average of 7–12 hours a week searching for or creating instructional materials, often online and through unverified or ambiguous sources.⁶

HQIM are designed to ensure that students experience grade-level, standards-aligned instruction, helping teachers to maintain high academic expectations for *all* students.⁷ The hard truth is that students of color, those from low-income families, multilingual learners, and students with learning disabilities have had even less access to these resources than their peers.⁸ Using HQIM in instruction ensures that all students are given access to rigorous academic content, including special populations such as multilingual learners and students with exceptionalities. The need for high-quality, standards-aligned instructional materials has never been greater.

What are HQIM?

HQIM refers to curricular materials (e.g., textbooks, curriculum programs) that are standards aligned, rigorous, and grade level appropriate. Generally, materials are considered HQIM when they satisfy the following domains outlined by [EdElements](#):

- **Gateway Criteria:** Materials align with the state standards at the level of rigor defined by the standard. For example, in ELA, student texts are both quantitatively and qualitatively complex.
- **Horizontal Alignment:** Materials give all students extensive work with grade-level problems through collaboration, practice, and formative/summative assessments.
- **Instructional Supports:** Materials provide research-based strategies and scaffolding so that all students can actively participate in grade-level work.
- **Vertical Alignment:** Materials are aligned across grades, and tasks develop in complexity across grades.

The leader in evaluating and identifying HQIM is [EdReports](#), a non-profit organization that conducts independent reviews of comprehensive curricula for ELA, math, and science. Each discipline-specific rubric is developed and refined through literature reviews and input from educators and subject matter experts.⁹ For a snapshot of what this looks like, see Table 1.

Table 1. Gateway 1: Focus & Coherence, K–8 Mathematics

Criterion 1.1: Materials assess grade-level content and give all students extensive work with grade-level problems to meet the full intent of grade-level standards.

- Indicator 1a: Materials assess the grade-level content and, if applicable, content from earlier grades.
- Indicator 1b: Assessment information is included in the materials to indicate which standards are assessed.

Table 1. Gateway 1: Focus & Coherence, K–8 Mathematics

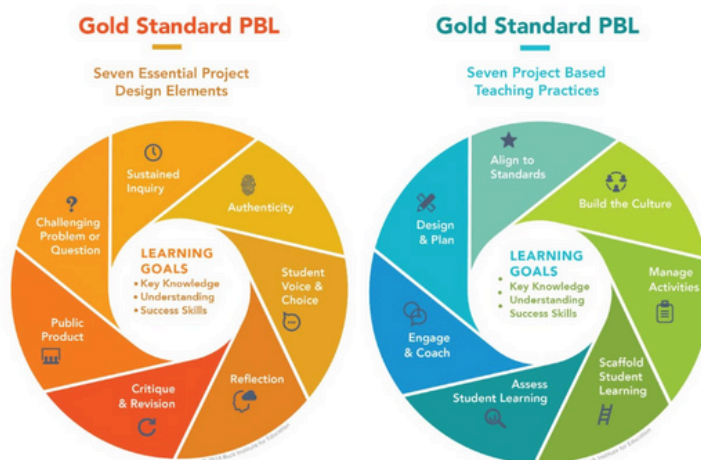
Criterion 1.2: Each grade’s materials are coherent and consistent with the Standards.

- Indicator 1e: When implemented as designed, the majority of the materials address the major clusters of each grade.
- Indicator 1f: Supporting content enhances focus and coherence simultaneously by engaging students in the major work of the grade.
- Indicator 1g: Materials include problems and activities that serve to connect two or more clusters in a domain or two or more domains in a grade.
- Indicator 1h: Content from future grades is identified and related to grade-level work, and materials relate grade-level concepts explicitly to prior knowledge from earlier grades.
- Indicator 1i: In order to foster coherence between grades, materials can be completed within a regular school year with little to no modification.

Source: Evidence Guide, K–8 Mathematics v.1.5 retrieved from <https://edreports.org/process/review-tools/math-k-8>

The Solution: Gold Standard PBL as HQIM

Gold Standard PBL is a framework that represents research-based, classroom-proven design elements and teaching practices (pg. 34)¹⁰ When implemented effectively, [Gold Standard PBL](#) is a transformative experience for students with demonstrated positive and significant learning outcomes for all students, particularly for students furthest from opportunity.¹¹



To support our partners in K–12 in implementing high quality PBL more easily, we have developed a collection of Gold Standard Project Units for ELA, math, science, and social studies. Each unit consists of detailed, rigorous, standards-based lessons that build students’ content knowledge while they simultaneously develop authentic, relevant products. Each unit is designed to replace a similar unit in a typical grade level or course. Included in the facilitation details are literacy supports, research-based instructional routines, and scaffolds for language and content. In each unit, there are multiple opportunities for formative and summative assessment, both within and outside of students’ development of the project’s products. The content progression in each unit is developed in a mastery-based approach, ensuring students have multiple opportunities to demonstrate understanding of the standards, concepts, and skills within the project.

Adding these Gold Standard Project Units to PBLWorks offerings will enable more teachers to implement Gold Standard PBL while reducing planning time, thus freeing up teachers to spend more time creating opportunities for students to engage in deeper learning. Using these HQIM for PBL supports new teachers, or those new to PBL or a subject area, to more quickly and easily implement rigorous, grade-level instruction to all learners.

Are the PBLWorks Project Units HQIM?

Although EdReports primarily measures the quality of core curricula (e.g., comprehensive textbooks), many indicators within their rubrics are relevant metrics for determining whether supplemental curricula (e.g., PBL project units) meet the threshold for HQIM. Figure 1 below demonstrates the overlap between HQIM and Gold Standard PBL. At their core, both focus on rigorous, standards-aligned learning experiences with appropriate scaffolding, language and multilingual supports, and robust formative and summative assessments.

Figure 1. HQIM and Gold Standard PBL



HQIM PBL Unit Example: 6th Grade Mathematics: Community Recipes

Project: Community Recipes

Grade level: 6th

Subject: Math

Content Standards: 6.RP.A.1, 6.RP.A.2, 6.RP.A.3a, 6.RP.A.3d, 6.NS.B.2

Standards for Mathematical Practice: SMP.1, SMP.2, SMP.3, SMP.4

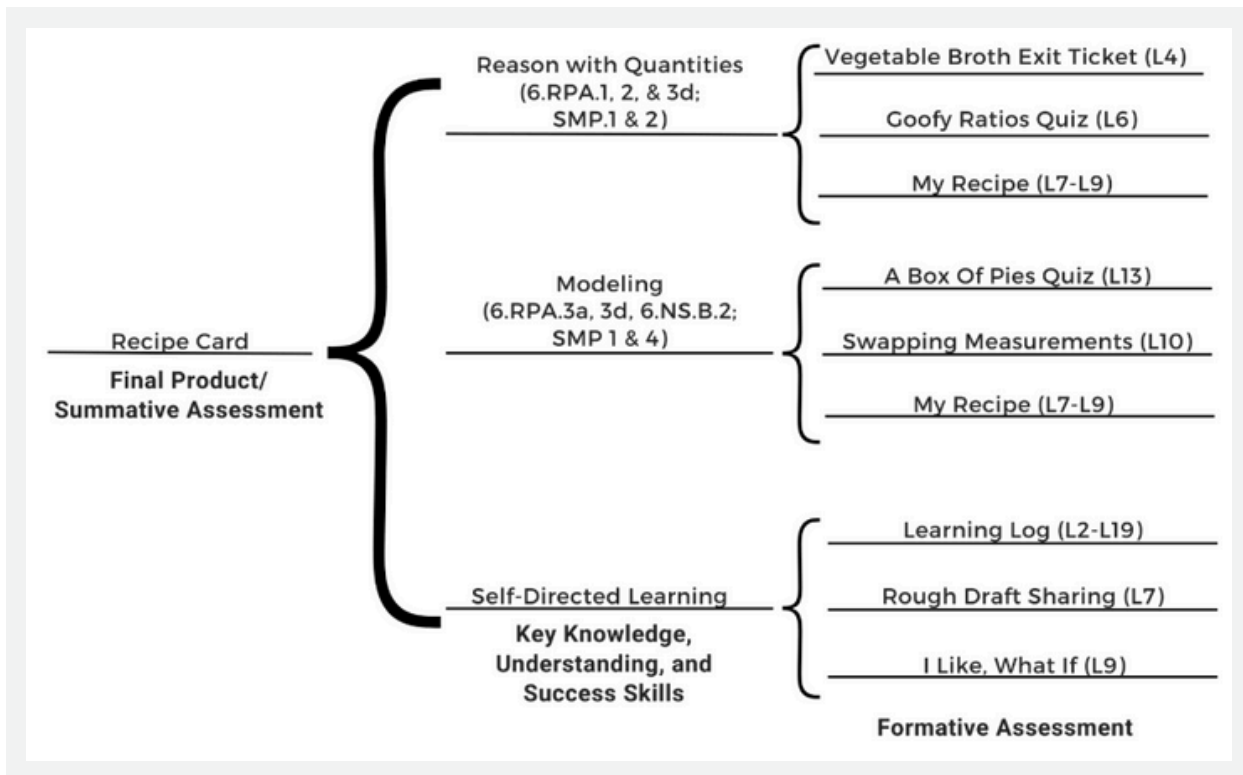
Overview: In this unit, students preserve a recipe that is important to a family or community member, then scale the recipe to serve more or less people. Later in the unit, students work with their project team to create a food blog to tell the stories of their team’s recipes and share how to prepare the recipes for different quantities of people.

The Assessment Maps

The following is a snapshot from the Community Recipes Project Assessment Map. The snapshot shows how students are assessed multiple times on content standards and SMPs throughout the unit, as well as how each of the assessments builds student knowledge that is needed to complete the individual product, the Recipe Card.

The Assessment Map exemplifies how EdReports indicators 1a (Materials assess the grade-level content and, if applicable, content from earlier grades) and 1b (Assessment information is included in the materials to indicate which standards are assessed) are evident in the unit. Each formative and summative assessment is mapped to a [Project Rubric](#).

Example of Assessment Map



In Lesson 10, students complete the Swapping Measurements task (seen in the snapshot of the assessment map above).

Swapping Measurements

Directions

Read the information and the table below. Use it to respond to the questions that follow.

Did you know that different countries have measurements with the same names, but the measurements are different in size? The following chart shows some standard cooking measurements that differ by country:

	Australia	South Africa	United States*
1 Tablespoon	10 g	9 g	8 g
1 Teaspoon	2.5 g	3 g	2.5 g
1 Cup	125 g	113 g	120 g

*United States units shown are US customary units, not units used for nutrition labeling.

In this task, students choose a recipe with their team and represent how the quantity of ingredients is different depending on which country's units of measurement are used. Students work with their team on a vertical whiteboard to create an input-output table for one ingredient measured in two different countries, then graph the data.





The following embedded supports are outlined in the teacher notes for the task:

Lesson Structure

Students interact with physical realia prior to completing the task. They inspect a one-cup measuring cup and a tablespoon and make predictions about how many tablespoons are in one cup. Students may access the cups during the task. ([EdReports K–8 Math](#), Indicator 3j)

Students form visibly random teams of three to complete the task. ([EdReports K–8 Math](#), Indicator 3m)

In teams, students complete a [Three Reads](#) to make sense of the task before working together to answer each question. ([EdReports K–8 Math](#), Indicator 3p)

Students create tables and graphs to represent the relationship between the quantity of an ingredient used in a recipe using two different countries' measuring tools. ([EdReports K–8 Math](#), Indicator 2a)

Students are asked to think about the difference in their recipes based on taste. In other words, students can show understanding of equivalent ratios by verbally explaining whether or not a recipe might taste [saltier/spicier/sweeter] if prepared with measuring instruments from a different country. ([EdReports K–8 Math](#), Indicator 3j)

After completing the task, students complete a reflection connecting the work in the task on equivalent ratios and tasks to the driving question of the unit, "How can we share and preserve community recipes?" ([EdReports K–8 Math](#), Indicator 3l)

Next Steps for Your PBL Journey

With key knowledge, understanding, and success skills at the center, PBLWorks Gold Standard Project Units are standards-aligned, rigorous, equitable, and grade-level appropriate. The projects were developed with [Essential Project Design Elements](#) and [Project Based Teaching Practices](#) already embedded in the resources, reducing teachers' time spent designing or planning projects to ensure deeper learning experiences for students. The instructional materials include all resources needed to successfully implement a project, including scaffolds to support individual student learning needs, literacy supports, rubrics, and formative and summative assessments. This enables teachers to spend more of their time and energy on being responsive to the individual and collective needs of their students.

We are dedicated to building a strong evidence base that demonstrates the effectiveness and impact of our services and Project Based Learning as a whole.

Discover our research-driven initiatives, including Strategic Projects, Research-Based Tools, and Research Publications, [here](#)



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