

Context:

As schools in the Mastery-based Learning Collaborative design systems of instruction and assessment that are culturally responsive-sustaining and mastery-based, they must grapple with the fundamental question of what it means for a student to demonstrate mastery in a skill – and how to communicate student progress to various stakeholders in education. Schools throughout the country have developed a wide variety of answers to this question, but those answers largely fall in two pathways: the **Content-Area** approach, which organizes sets of standards (learning outcomes) within content area categories (For example, English, Mathematics, or Visual Arts), and the **Transferable Skills** approach, which organizes state standards into learning outcomes within broad, overarching skills (for example, Communication or Problem-Solving).

Pathway 1: Content-area Learning Outcomes

Pros:

- Teachers and students are already familiar with content-specific courses and ways of learning.
- Teachers are usually already using state content standards to some degree.
- Teachers can start designing instruction, assessment, and feedback practices immediately.
- A content-based system can usually fit into current grading and reporting platforms.
- Students can see changes in teacher practice and greater success in their learning right away.
- Implementation is usually quicker.

Cons

- In schools that have organized their Learning Outcomes by subject area, educators may then have to design an additional system to allow students to demonstrate that they have mastered the elements of the school's Portrait of a Graduate or set of cross-cutting skills.

Process Outline and Resources: Focusing on Units of Study

Process	Resources
<p>Step 1: Identify Standards</p> <p>Teachers review WA State Standards and identify or come to consensus on the most important outcomes to teach and assess.</p>	<p><i>Links to essential resources:</i></p> <ul style="list-style-type: none"> • Washington State Standards • Mastery-based unit planning protocol • Unit Plan Tuning Protocol
<p>Step 2: Create Learning Outcomes</p> <p>Teachers discuss and unpack state standards to create learning outcomes for each unit.</p>	<p><i>Links that might inform learning outcomes:</i></p> <ul style="list-style-type: none"> • Smarter Balanced Assessment • Washington Comprehensive Science Assessment <ul style="list-style-type: none"> ◦ Test Specifications - High School • Sample Learning Outcomes for ELA, Math and Science designed to mirror the organization of the WA state assessments)
<p>Step 3: Design Success Criteria</p> <p>Teachers unpack learning outcomes to provide student-facing success criteria that can be used to design formative routines, provide feedback to students, and score student work.</p>	<p><i>Links that support the design of success criteria:</i></p> <ul style="list-style-type: none"> • Scoring Criteria design protocol • Scoring Criteria design guide
<p>Step 4: Design Summative Assessment</p> <p>Teachers create or co-create with students the ways in which students can demonstrate their mastery of the set of learning outcomes described in the unit.</p> <p>Or, alternatively, teachers check their current assessments with these questions in mind:</p> <ul style="list-style-type: none"> • Does this assessment allow the student to apply skills to novel challenges, questions, problems and/or texts? • Does this assessment allow students to demonstrate both mastery and excellence as we have 	<p><i>Links that support the design of summative assessments:</i></p> <ul style="list-style-type: none"> • Summative assessment design guide and protocol • MBLC Unit Template

defined them in our scoring criteria?	
Step 5: Design Instruction, Formative Assessment, and Feedback Routines Teachers map lessons that will help students reach the intended learning outcomes, design formative assessments and routines that show where students are in their learning, and implement feedback loops that allow for just-in-time feedback for students to guide their own learning.	<i>Links that support instructional design:</i> <ul style="list-style-type: none"> • Elements of Effective Instruction: specifically <ul style="list-style-type: none"> ○ Clear, Shared Outcomes ○ Practice and Feedback
Step 6: Grading and Reporting Educators agree on common principles about grading practices and align the codes they enter in their gradebooks with those principles. Schools report grades or other codes that accurately reflect student learning.	<i>Links that support thinking about grading and reporting:</i> <ul style="list-style-type: none"> • Grading and Reporting for Educational Equity

Pathway 2: Shared Outcomes

A transferable skill is one that cuts across all areas of student learning. These skills go by many names – 21st Century Skills, power standards, cross-cutting standards, critical concepts, and others – and can be demonstrated across content areas and student learning experiences outside of school. Many systems use skill categories like “communication,” “problem solving,” and “collaboration,” for instance.

Pros:

- May align well with a school or district’s Portrait of a Graduate.
- Targets the skills that employers and colleges most often ask students to have leaving high school.
- Provide maximum flexibility in student learning.
- Focus on critical thinking, deep learning, social-emotional learning and wellness over un-integrated content knowledge.
- Unifies teachers under one system of learning instead of isolating them by content as students advance in school.

Cons:



- Usually requires larger shifts in mindsets among teachers, students, and parents.
- Requires substantial rethinking and redesign of how schools operate.
- Requires serious community engagement and communication.
- Rarely fits easily into existing student information systems.

Process Outline and Resources: Focusing on Transferable Skills or Cross-Cutting Outcomes

Process	Resources
Step 1: Engage your community in designing a Profile of a Graduate All school stakeholders work together to define the sets of skills students must have in order to graduate.	<i>Links that might include helpful language:</i> <ul style="list-style-type: none"> • Washington Profile of a Graduate • Washington State CTE Leadership Skills • New England Association of Schools and Colleges: Vision of a Graduate
Step 2: Use the Profile of a Graduate to define assessable, transferable skills Teachers discuss and unpack the skills described in the Profile of a Graduate to define a limited set of assessable skills	<i>Links that support transferable skills development:</i> <ul style="list-style-type: none"> • Avanti High School Habits of the Mind and heart • Maritime High School • Tulalip Heritage Big Picture (see page 6-11) • Harwood Union High School (Vermont) • Hunter's Point Community Middle School • (Cross-cutting Outcomes: Scholarship, Creativity, Community - see page 1 for an explanation of these outcomes)
Step 3: Map content standards to transferable skills Teachers map existing content standards to transferable skills to find where state standards align with broader, cross-cutting skills.	<i>Links that support content mapping:</i> <ul style="list-style-type: none"> • The Young Womens' Leadership School of Astoria - this set of 10 Shared Outcomes is aligned to the state/national standards • Faculty Handbook: The Young Women's Leadership School of Astoria (A Competency Collaborative Living Lab school)
Step 4: Design Success Criteria Teachers unpack transferable skills to provide student-facing success criteria that	<i>Links that support the design of success criteria:</i> <ul style="list-style-type: none"> • Scoring Criteria design protocol • Scoring Criteria design guide

can be used to design formative routines, provide feedback to students, and score student work.	
Step 5: Design Units of Study From here, teachers can design units of study using the first pathway and resources, taking care to ensure that instruction, feedback, and assessment actually target the transferable skill and don't simply use it as a heading for content standards alone.	<i>See Pathway 1 for links to resources that support thinking about unit design, instruction, feedback, and assessment.</i>
Step 6: Grading and Reporting Educators agree on common principles about grading practices and align the codes they enter in their gradebooks with those principles. Schools report grades or other codes that accurately reflect student learning.	<i>Links that support thinking about grading and reporting:</i> <ul style="list-style-type: none"> • Grading and Reporting for Educational Equity

Sample Grading Categories (may be called Competencies or Learning Outcomes) and Performance Indicators That Align with WA State Assessments:

- These categories capture the content standards that align with WA State assessments. As such, they may be useful categories for content area teachers to use in their grade books in classes.
- For Social Studies and ELA, the categories do not change across grade bands. For Mathematics and Science, they do. For finer-grained descriptions of learning outcomes that fall under each category, see the relevant state standards documents.
- These categories make the most sense in a system that focuses on content-area competency ([This example from MS 422 in New York](#) or [this sample from King Middle School in Portland](#)) show what these report cards can look like.)

Science

Competencies or Learning Outcomes	K-5 Performance Indicators	6-8 Performance Indicators	9-12 Performance Indicators
Physical Sciences	<ul style="list-style-type: none"> PS1 Matter and Its Interactions PS2 Motion and Stability: Forces and Interactions PS3 Energy PS4 Waves and Their Applications in Technologies for Information Transfer 	<ul style="list-style-type: none"> PS1 Matter and Its Interactions (5.PS1.1-4) PS2 Motion and Stability: Forces and Interactions (PS2: 1-4) PS3 Energy PS4 Waves and Their Applications in Technologies for Information Transfer 	<ul style="list-style-type: none"> PS1 Matter and Its Interactions (HS.PS.1.1-8) PS2 Motion and Stability: Forces and Interactions (HS.PS.2.1-6) PS3 Energy (HS.PS.3.1-5) PS4 Waves and Their Applications in Technologies for Information Transfer (HS.PS.4. 1-5)
Life Sciences	<ul style="list-style-type: none"> LS1 From Molecules to Organisms: Structures and Processes LS2 Ecosystems: Interactions, Energy, and Dynamics LS3 Heredity: Inheritance and Variation of Traits LS4 Biological Evolution: Unity and Diversity 	<ul style="list-style-type: none"> LS1 From Molecules to Organisms: Structures and Processes LS2 Ecosystems: Interactions, Energy, and Dynamics LS3 Heredity: Inheritance and Variation of Traits LS4 Biological Evolution: Unity and Diversity 	<ul style="list-style-type: none"> LS1 From Molecules to Organisms: Structures and Processes LS2 Ecosystems: Interactions, Energy, and Dynamics LS3 Heredity: Inheritance and Variation of Traits LS4 Biological Evolution: Unity and Diversity
Earth and Space Sciences	<ul style="list-style-type: none"> ESS1 Earth's Place in the Universe ESS2 Earth's Systems ESS3 Earth and Human Activity 	<ul style="list-style-type: none"> ESS1 Earth's Place in the Universe ESS2 Earth's Systems ESS3 Earth and Human Activity 	<ul style="list-style-type: none"> ESS1 Earth's Place in the Universe ESS2 Earth's Systems ESS3 Earth and Human Activity
Engineering,	<ul style="list-style-type: none"> ETS1 Engineering 	<ul style="list-style-type: none"> ETS1 Engineering 	<ul style="list-style-type: none"> ETS1 Engineering



Technology, and Applications of Science	Design	Design	Design
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English

Competencies or Learning Outcomes	K-5 Performance Indicators	6-8 Performance Indicators	9-12 Performance Indicators
Reading	Reading	Reading	Reading
Writing	Writing	Writing	Writing
Speaking & Listening	Speaking & Listening	Speaking & Listening	Speaking & Listening
Research & Inquiry	Research & Inquiry	Research & Inquiry	Research & Inquiry
Language	Language	Language	Language

Math

Competencies or Learning Outcomes	K-5 Performance Indicators	6-8 Performance Indicators	9-12 Performance Indicators
Concepts and Procedures	<ul style="list-style-type: none"> Operations and Algebraic Thinking Number and Operations in Base Ten Number and Operations—Fractions Measurement and Data Geometry 	<ul style="list-style-type: none"> The Number System Expressions and Equations Functions Geometry Statistics and Probability 	<ul style="list-style-type: none"> Number and Quantity Algebra Functions Modeling Geometry Statistics and Probability
Problem Solving	<ul style="list-style-type: none"> Problem Solving: Make sense of problems and persevere in solving 	<ul style="list-style-type: none"> Problem Solving: Make sense of problems and persevere in solving 	<ul style="list-style-type: none"> Problem Solving: Make sense of problems and persevere in solving

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Communicating Reasoning	<ul style="list-style-type: none"> Communicating Reasoning: Reason abstractly and quantitatively. Communicating Reasoning: Construct viable arguments and critique the reasoning of others. 	<ul style="list-style-type: none"> Communicating Reasoning: Reason abstractly and quantitatively. Communicating Reasoning: Construct viable arguments and critique the reasoning of others. 	<ul style="list-style-type: none"> Communicating Reasoning: Reason abstractly and quantitatively. Communicating Reasoning: Construct viable arguments and critique the reasoning of others.
Modeling & data Analysis	<ul style="list-style-type: none"> Modeling: Map the relationships between important quantities using modeling tools. 	<ul style="list-style-type: none"> Modeling: Map the relationships between important quantities using modeling tools. 	<ul style="list-style-type: none"> Modeling: Map the relationships between important quantities using modeling tools.

Social Studies

Competencies or Learning Outcomes	K-5 Performance Indicators	6-8 Performance Indicators	9-12 Performance Indicators
Social Studies Skills	<ul style="list-style-type: none"> SSS1: Uses critical reasoning skills to analyze and evaluate claims. SSS2: Uses inquiry-based research. SSS3: Deliberates public issues. SSS4: Creates a product that uses social studies content to support a claim and presents the product in a 	<ul style="list-style-type: none"> SSS1: Uses critical reasoning skills to analyze and evaluate claims. SSS2: Uses inquiry-based research. SSS3: Deliberates public issues. SSS4: Creates a product that uses social studies content to support a claim and presents the product in a 	<ul style="list-style-type: none"> SSS1: Uses critical reasoning skills to analyze and evaluate claims. SSS2: Uses inquiry-based research. SSS3: Deliberates public issues. SSS4: Creates a product that uses social studies content to support a claim and presents the product in a

	manner that meaningfully communicates with a key audience.	manner that meaningfully communicates with a key audience.	manner that meaningfully communicates with a key audience.
Civics	<ul style="list-style-type: none"> • C1: Understands key ideals and principles of the United States, including those in the Declaration of Independence, Constitution, and other foundational documents. • C2: Understands the purposes, organization, and function of governments, laws, and political systems. • C3: Understands the purposes and organization of tribal and international relationships and U.S. foreign policy. • C4: Understands civic involvement. 	<ul style="list-style-type: none"> • C1: Understands key ideals and principles of the United States, including those in the Declaration of Independence, Constitution, and other foundational documents. • C2: Understands the purposes, organization, and function of governments, laws, and political systems. • C3: Understands the purposes and organization of tribal and international relationships and U.S. foreign policy. • C4: Understands civic involvement. 	<ul style="list-style-type: none"> • C1: Understands key ideals and principles of the United States, including those in the Declaration of Independence, Constitution, and other foundational documents. • C2: Understands the purposes, organization, and function of governments, laws, and political systems. • C3: Understands the purposes and organization of tribal and international relationships and U.S. foreign policy. • C4: Understands civic involvement.
Economics	<ul style="list-style-type: none"> • E1: Understands that people have to make choices between wants and needs and evaluate the outcomes of those choices. • E2: Understands the components of 	<ul style="list-style-type: none"> • E1: Understands that people have to make choices between wants and needs and evaluate the outcomes of those choices. • E2: Understands the components of 	<ul style="list-style-type: none"> • E1: Understands that people have to make choices between wants and needs and evaluate the outcomes of those choices. • E2: Understands the components of

	<p>an economic system.</p> <ul style="list-style-type: none"> E3: Understands the government's role in the economy. E4: Understands the economic issues and problems that all societies face. 	<p>an economic system.</p> <ul style="list-style-type: none"> E3: Understands the government's role in the economy. E4: Understands the economic issues and problems that all societies face. 	<p>an economic system.</p> <ul style="list-style-type: none"> E3: Understands the government's role in the economy. E4: Understands the economic issues and problems that all societies face.
Geography	<ul style="list-style-type: none"> G1: Understands the physical characteristics, cultural characteristics, and location of places, regions, and spatial patterns on the Earth's surface. G2: Understands human interaction with the environment. G3: Understands the geographic context of global issues and events. 	<ul style="list-style-type: none"> G1: Understands the physical characteristics, cultural characteristics, and location of places, regions, and spatial patterns on the Earth's surface. G2: Understands human interaction with the environment. G3: Understands the geographic context of global issues and events. 	<ul style="list-style-type: none"> G1: Understands the physical characteristics, cultural characteristics, and location of places, regions, and spatial patterns on the Earth's surface. G2: Understands human interaction with the environment. G3: Understands the geographic context of global issues and events.
History	<ul style="list-style-type: none"> H1: Understands historical chronology. H2: Understands and analyzes causal factors that have shaped major events in history. H3: Understands that there are multiple perspectives and 	<ul style="list-style-type: none"> H1: Understands historical chronology. H2: Understands and analyzes causal factors that have shaped major events in history. H3: Understands that there are multiple perspectives and 	<ul style="list-style-type: none"> H1: Understands historical chronology. H2: Understands and analyzes causal factors that have shaped major events in history. H3: Understands that there are multiple perspectives and

	<ul style="list-style-type: none"> interpretations of historical events. H4: Understands how historical events inform analysis of contemporary issues and events. 	<ul style="list-style-type: none"> interpretations of historical events. H4: Understands how historical events inform analysis of contemporary issues and events. 	<ul style="list-style-type: none"> interpretations of historical events. H4: Understands how historical events inform analysis of contemporary issues and events.
Tribal Sovereignty	<ul style="list-style-type: none"> Tribal Sovereignty 	<ul style="list-style-type: none"> Tribal Sovereignty 	<ul style="list-style-type: none"> Tribal Sovereignty

Samples from MBLC Schools and other schools:

Full Set of success criteria for core subjects from the Rhode Island Department of Education: These scoring criteria were written and revised by groups of educators from across Rhode Island. These sets include elementary, middle and high school examples

Elementary:

Middle School:

[Scoring Criteria for Middle School English](#) - Tumwater and Bush Middle Schools, *under construction*

[Scoring criteria for 6th Grade math](#) - Gorham middle school, Maine

[Scoring criteria for 7th Grade math](#), Gorham middle school, Maine

[Scoring criteria for 8th grade math](#), Gorham Middle school, Maine

[Scoring Criteria for 6th grade science](#), Tumwater & Bush Middle Schools

[Scoring Criteria for 7th grade science](#), Tumwater & Bush Middle Schools

[Scoring Criteria for 8th grade science](#), Tumwater & Bush Middle Schools

High School

Sample set of scoring criteria from multiple projects for an interdisciplinary project Gibson Ek Competencies

Samples

The contents of this resource were developed under a grant from the U.S. Department of Education. However, those contents do not necessarily represent the policy of the U.S. Department of Education, and you should not assume endorsement by the Federal Government.