



CONNECTICUT  
LEAGUE OF  
INNOVATIVE SCHOOLS

**Curriculum Workshop**  
**June 25-26, 2014**



Is a non-profit support organization based in Portland Maine, working nationally with schools, districts and state agencies, providing coaching, and developing tools.



GSP has served as the coordinator of the **New England Secondary School Consortium** since its inception in 2009

# NESSC Vision

## Vision

The New England Secondary School Consortium envisions every adolescent in Connecticut, Maine, New Hampshire, Rhode Island, and Vermont graduating from a new generation of high-performing, internationally competitive high schools prepared for success in the colleges, careers, and communities of our interconnected global society.

# NESSC Goals

1. Increase five year graduation rates across each of the five states.
2. Decrease annual dropout rates across each of the five states.
3. Increase the percentage of students enrolling in two- and four-year college-degree programs or pursuing industry-certified accredited postsecondary certificates.
4. Increase the percentage of students who graduate from high school college ready.

# Who is in the room?

1. Introduce your school
2. What are some highlights of the year?
3. Where in the implementation process to MBL is your school?

# Workshop Outcomes

Work with content area  
colleagues to develop a draft of  
Graduation Standards/  
Performance Indicators

# Workshop Outcomes

Learn how to write graduation standards and performance indicators



# Workshop Outcomes

Gain a deeper understanding of mastery-based learning

# Workshop Outcomes

Develop a plan to share to share work with colleagues-school-wide and in content areas

# Workshop Outcomes

Connect with LIS colleagues  
and learn from one another

# Mastery-Based Learning Simplified:

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Developing Effective Graduation  
Standards and Performance  
Indicators

# Outcomes

Provide common definitions for understanding standards vocabulary

# Outcomes

Explain the key components of a mastery-based system and how they inform instruction and assessment.

# Outcomes

Understand the distinction between graduation standards, performance indicators, and learning objectives.

# Outcomes

Explain key steps in the process of implementing a mastery-based system.



# So, What's The Problem With Standards?

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3,500 performance indicators  
across 14 content areas k-12:

# So, What's The Problem With Standards?

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“You would have to change schooling from K-12 to K-22. The sheer number of standards is the biggest impediment to implementing standards.”

- Robert Marzano (2001)

# Common Terms for Standards

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**PRIORITY  
STANDARD**

**LEARNING  
TARGETS**

**POWER  
STANDARDS**

# Common Terms for Standards

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**POWER  
STANDARDS**

**LEARNING  
TARGETS**

**DESCRIPTORS**

**PRIORITY  
STANDARD**

**PROFICIENCY  
STANDARDS**

**COMPETENCIES**

# Common Terms for Standards

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**POWER  
STANDARDS**

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STANDARD**

**DESCRIPTORS**

**PROFICIENCY  
STANDARDS**

**BENCHMARKS**

**COMPETENCIES**

**MASTERY  
OBJECTIVES**

**MEASUREMENT  
TARGETS**

# Common Terms for Standards

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**GRADUATION  
STANDARD**

**POWER  
STANDARDS**

**PRIORITY  
STANDARD**

**LEARNING  
TARGETS**

**DESCRIPTORS**

**LEARNING  
OBJECTIVES**

**PROFICIENCY  
STANDARDS**

**BENCHMARKS**

**COMPETENCIES**

**PERFORMANCE  
INDICATORS**

**MASTERY  
OBJECTIVES**

**MEASUREMENT  
TARGETS**

# **MASTERY**

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is a student's ability to transfer learning in and/or across content areas.

# COMPETENCY

is a student's ability to transfer learning in and/or across content areas.



# PROFICIENCY

is a student's ability to transfer learning in and/or across content areas.

# STANDARD

Established norms or benchmarks for learning that define what students need to know and be able to do.

# All These Terms Are Standards

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Graduation Standard  
Power Standards



Learning Targets



**BROAD**



**SPECIFIC**

Performance Indicator



Graduation Standard



Performance Indicator



Learning Objective



**Graduation Standards**

**Performance Indicators**

**Learning Objectives**

**INSTRUCTIONAL FOCUS**

Graduation Standards

Performance Indicators

Learning Objectives



**Graduation Standards**

**Performance Indicators**

Summative Assessment

**Learning Objectives**

Formative Assessment

**ASSESSMENT = EVIDENCE**

# Mastery-Based Learning Simplified

A Great Schools Partnership Learning Model

Graduation Requirement	Reporting Method		Assessment Method
YES	Transcripts and Report Cards	<b>Cross-Curricular Graduation Standards</b> 5–8 standards taught in all content areas	<b>Body of Evidence</b> Students demonstrate achievement of standards through a body of evidence evaluated using common rubrics
YES	Transcripts and Report Cards	<b>Content-Area Graduation Standards</b> 5–8 standards for each content area	<b>Verification of Proficiency</b> Students demonstrate achievement of content-area graduation standards through their aggregate performance on summative assessments over time
NO	Progress Reports	<b>Performance Indicators</b> 5–10 indicators for each cross-curricular and content-area standard that move students toward proficiency and the achievement of graduation standards	<b>Summative Assessment</b> Graded summative assessments are used to evaluate the achievement of performance indicators
NO	Teacher Feedback	<b>Learning Objectives</b> Learning objectives guide the design of curriculum units that move students toward proficiency and the achievement of performance indicators	<b>Formative Assessment</b> Ungraded formative assessments are used to evaluate student learning progress





# A Graduation Standard Is...

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A standard that focuses instruction on the most foundational, enduring, and leveraged concepts and skills within a discipline.



# Foundational Lens:

*To what extent is this statement **at the heart of understanding the content area** and to what extent does it align with national & state standards?*

# Endurance Lens:

*To what extent does this statement provide students with knowledge & skills that will be of **value beyond a particular point in time** (ie, test, unit)?*

# Leverage Lens:

*Will this provide knowledge and skills that will be of **use in multiple disciplines?***

# Science

Demonstrate engineering concepts across multiple disciplines and novel situations as demonstrated through the integration of scientific and engineering practices and cross-cutting concepts.

# Social Studies

Apply and demonstrate knowledge of major eras, enduring themes, turning points and historic influences to analyze the forces of continuity and change in the community, the state, the United States and the world.

# A Performance Indicator

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Describes or defines what students need to know and be able to do to demonstrate mastery of a graduation standard.



# Reading

Interpret, anal analyze, and evaluate complex literary and informational texts

**A** Cite strong and thorough textual evidence to support an analysis of the text, including any applicable primary & secondary sources and determine both implicit and explicit meanings



# Reading

Interpret, analyze, and evaluate complex literary and informational texts

**B** Analyze how an author chose to structure a text and how that structure contributes to the text's meaning and its aesthetic and rhetorical impact

# Reading

Interpret, analyze, and evaluate complex literary and informational texts

**C** Evaluate content and multiple sources of information presented in diverse media and formats

# A Performance Indicator

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Is measurable.



# A Performance Indicator

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Students can demonstrate their performance over time.



# A Performance Indicator

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The aggregation of proficiency on these performance indicators measures whether a student has met the graduation standard.



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# Learning Objectives Are...

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The component parts of a performance indicator - that is, the performance indicator has been broken down into a series of progressive steps and digestible chunks.



# Learning Objectives Are...

Clustered in units.





# Learning Objectives Are...

Determined by teachers individually or in teams.



# Learning Objectives Are...

Developed based on teacher judgment and knowledge of learners as well as guidance provided from content area collaboration.



# Learning Objectives Are...

Preparation and practice for the summative assessment which measures proficiency toward one or more of the performance indicators.



# Learning Objectives Are...

Explicitly shared with students and connected to the “parent” performance indicators/graduation standards.



# Learning Objectives Are...

Assessed using formative assessments, allowing teacher to regroup students & differentiate instruction as needed.



<b>Graduation Standard</b>	The student <b>applies understanding</b> of economic concepts and systems to <b>analyze</b> decision-making and the interactions between individuals, households, businesses, governments and societies.
<b>Performance Indicators</b>	<p>The student <b>describes and analyzes</b> how planned and market economies shape the production, distribution, and consumption of goods, services, and resources.</p> <p>The student analyzes and evaluates how people across the world have addressed issues involved with the distribution of resources and sustainability.</p> <p>The student evaluates the costs and benefits of governmental fiscal and monetary policies.</p>
<b>Learning Targets</b>	<p>I can <b>explain</b> how scarcity impacts a market economy and a planned economy.</p> <p>I can <b>compare and contrast</b> the allocation of goods in a market economy and planned economy.</p>

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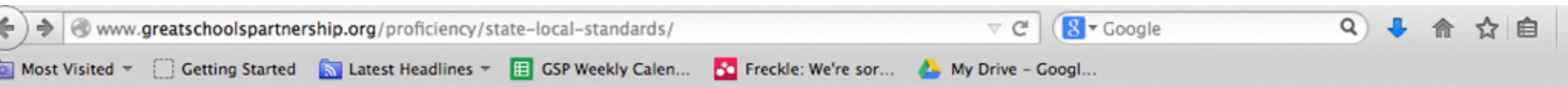
# The Envelope Please...

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Order the statements in the envelope on your table from broad to specific



# [greatschoolspartnership.org/proficiency/state-local-standards/](https://www.greatschoolspartnership.org/proficiency/state-local-standards/)



State standards provide the foundation—the grade-level [learning progressions](#) that teachers use to design their [curriculum](#)—but schools determine how standards will be implemented, including which standards must be met. In an ideal world, every student would meet every standard. But the reality is that teachers may not have the time to address every standard as comprehensively as they might want to, and not every student will master every standard. Proficiency-Based Learning Simplified recommends that schools prioritize the most essential knowledge and skills, and then work backward to design the curriculum. By using prioritization and the principles of [backward design](#), schools can certify achievement of essential standards and significantly increase college and career preparation.

In this section, school leaders and teachers will find detailed guidance on developing a practical and prioritized system of learning standards.

→ [A Practical System of Standards](#)

→ [Exemplar Content-Area Standards](#)

→ [Connecticut's Common Core of Learning](#)

→ [Maine's Guiding Principles](#)

→ [New Hampshire's Competency-Based Performance Standards](#)

→ [Rhode Island's Applied Learning Standards](#)

→ [Vermont's Vital Results](#)

<http://www.greatschoolspartnership.org/proficiency/state-local-standards/>

**\*NOTE:** While the exemplar standards are specific to Maine, districts and schools in other states can still use the standards as a general model and starting point for discussion.

We have also included related tools and resources that will help schools develop their own local standards using the Proficiency-Based Learning Simplified model. Additional resources can be found on the Maine Department of Education's [Getting to Proficiency](#) website.

## Exemplar Content-Area Standards

- [English Language Arts \(.pdf\)](#)
- [Mathematics \(.pdf\)](#)
- [Science \(.pdf\)](#)
- [Social Studies \(.pdf\)](#)
- [Visual and Performing Arts \(.pdf\)](#)
- [World Language \(.pdf\)](#)
- [Health and Physical Education \(.pdf\)](#)
- [Career and Education Development \(.pdf\)](#)

# Social Studies

## Sample Graduation Standards and Performance Indicators

This sample set of graduation standards and performance indicators is based primarily on the Maine Learning Results: Parameters for Essential Instruction (MLR, 2007) and the Common Core State Standards (CCSS, 2010, see key below for coding references). To ensure alignment with some of the more recent national work in the social studies fields, reference is also made to the College, Career, and Civic Life Framework for Social Studies State Standards (June 2013 draft), National Content Standards in Economics (2010), and Geography for Life (2012).

### Social Studies Graduation Standard 1

#### APPLICATIONS OF SOCIAL STUDIES PROCESSES, KNOWLEDGE AND SKILLS

Collaboratively and independently, research, present and defend discipline-based processes and knowledge from civics/government, economics, geography and history in authentic contexts. (MLR, A1; CCSS)

#### Common Core State Standards Key

- **RI** Reading Informational Text – Grade 5
- **W** Writing – Grade 5
- **RH** Reading in Literacy for History/ Social Studies – Grade 8 HS
- **WH** Writing in Literacy for History/ Social Studies – Grade 8 HS
- **SL** Speaking and Listening – Grades 5, 8, & HS

#### Fifth-Grade Performance Indicators

- A. Develop and answer questions related to social studies, by locating and selecting information and presenting findings. (MLR A1; CCSS RI 5.9; W 5.7 - 9)
- B. Determine two or more main ideas of a social studies text and explain how they are supported by key details; summarize the text. (MLR A1 B-D; CCSS RI 5.2, 5.4, 5.10)
- C. Explain how an author uses evidence to support particular points in a text:
  - Identify the evidence by quoting accurately;
  - Explain what the text says explicitly; and
  - Explain inferences by citing from the text. (MLR A1, F, G; CCSS RI 5.1, 5.8)

#### Eighth-Grade Performance Indicators

- A. Research, select, and present a position on a current social studies issue by proposing and revising research questions, and locating and selecting information from multiple and varied sources, using appropriate social studies tools and methods. (MLR A1 A-D, F-G, I-K; CCSS WH 8.7-9)
- B. Determine the central ideas or information and key steps in a process from a primary or secondary source; provide an accurate summary of the source distinct from prior knowledge or opinions. (MLR A1 e, h, I; CCSS RH 8.2-5, 8.9-10)
- C. Distinguish among fact, opinion and reasoned judgment in a text and cite specific textual evidence to support analysis. (MLR A1 B-C, F;

#### High School Performance Indicators

- A. Develop compelling inquiry questions and conduct research on current social studies issues by applying appropriate methods and ethical reasoning skills, and using relevant tools, technologies and sources from social studies fields to conduct the inquiry. (MLR A1 A-B, F-G, I-J, A2, A3; CCSS WH 7-9)
- B. Gather, synthesize and evaluate information from multiple sources representing a wide range of views; make judgments about conflicting findings from different sources, incorporating those from sources that are valid and refuting others. (MLR A1 B-E, I-J; CCSS RH 1-3, RH 6-9)
- C. Evaluate various explanations and authors' differing points of view on the same event or



# Mathematics

## Sample Graduation Standards and Performance Indicators

Based on Common Core State Standards in Mathematics (CCSS, 2010). Using the Kentucky Department of Education's "Progress to High School Conceptual Categories" flow chart, domains within K-8 were embedded in the original five high school domains and interpreted as standards within this proficiency-based learning model. Citations follow a distinct format: grade level, domain, standard, and in some cases, descriptor numbers. Modeling is embedded within the content standards as suggested in the CCSS document.

### Mathematics Graduation Standard 1

#### NUMBER AND QUANTITY

Reason and model quantitatively, using units and number systems to solve problems.

##### Fifth-Grade Performance Indicators

- A. Understand the place value system. (CCSS K.CC.A-C, K.NBT.A.1, 1.NBT.A-B, 2.NBT.A, 4.NBT.A, 5.NBT.A.1-3)
- B. Use place value understanding and properties of operations to add and subtract. (CCSS 1.NBT.C, 2.NBT.B)
- C. Use place value understanding and properties of operations to perform multi-digit arithmetic. (CCSS 3.NBT.A, 4.NBT.B)
- D. Understand fractions as numbers and explain fraction equivalence and ordering. (CCSS 3.NF.A, 4.NF.A)
- E. Use equivalent fractions as a strategy to add and subtract fractions. (CCSS 5.NF.A)
- F. Apply and extend understandings of operations on whole numbers to build fractions from unit fractions. (CCSS 4.NF.B)
- G. Apply and extend understandings of multiplication and division to multiply and divide fractions. (CCSS 5.NF.B)

##### Eighth-Grade Performance Indicators

- A. Understand ratio concepts and use ratio reasoning to solve problems. (CCSS 6.RP.A)
- B. Analyze proportional relationships and use them to solve real-world and mathematical problems. (CCSS 7.RP.A)
- C. Apply and extend previous understandings of multiplication and division to divide fractions by fractions. (CCSS 6.NS.A)
- D. Apply and extend previous understandings of numbers to the system of rational numbers. (CCSS 6.NS.C)
- E. Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers. (CCSS 7.NS.A)

##### High School Performance Indicators

- A. Extend the properties of exponents to rational exponents. (CCSS HSN.RN.A)
- B. Use the properties of rational and irrational numbers. (CCSS HSN.RN.B)
- C. Reason quantitatively and use units to solve problems. (CCSS HSN.Q.A)
- D. Perform arithmetic operations with complex numbers. (CCSS HSN.CN.A.1-2)
- E. Use complex numbers in polynomial identities and equations. (CCSS HSN.CN.C.7)



solve a problem efficiently. (RI.7)

- F. Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point(s). (RI.8)
- G. Integrate and compare information from several texts on the same topic, or in the same genre, in order to write or speak about the subject knowledgeably. (RL+RI.9)

specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient; recognize irrelevant. (RI.8)

- F. Analyze how multiple texts demonstrate factual or interpretive agreement, conflict, or different information on the same topic, and draw on themes, patterns or character types from a variety of literary and informational texts. (RL+RI.9)

question or solve a problem. (RL+RI.7)

- E. Delineate and evaluate the argument and specific claims in a text, including seminal U.S. texts, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning. (RI.8)
- F. Integrate information from diverse sources, including foundational U.S. documents, into a coherent understanding of an idea or event, noting discrepancies and agreement among sources. (RL+RI.9)

## English Language Arts Graduation Standard 3

### WRITING ARGUMENTS

Write clear and coherent arguments for a range of tasks, purposes, and audiences. (CCWA 1, 4,10)

#### Fifth-Grade Performance Indicators

Write opinion pieces on topics or texts, supporting a point of view with reasons and information that: (W.1)

- A. Introduce a topic or text clearly, state an opinion, and create an organizational structure in which ideas are logically grouped to support the writer's purpose. (W.1a)
- B. Provide logically ordered reasons that are supported by facts and details. (W.1b)
- C. Link opinion and reasons using words, phrases, and clauses. (W.1c)
- D. Provide a concluding statement or section related to the opinion presented. (W.1d)

#### Eighth-Grade Performance Indicators

Write arguments to support claims with clear reasons and relevant evidence that: (W.1)

- A. Introduce claim(s), acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically. (W.1a)
- B. Support claim(s) with logical reasoning and relevant evidence. (W.1b)
- C. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence. (W.1c)
- D. Establish and maintain a formal style. (W.1d)
- E. Provide a concluding statement or section that follows from and supports the argument presented. (W.1e)

#### High School Performance Indicators

Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence that: (W.1)

- A. Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), and distinguish the claim(s) from alternate or opposing claims. (W.1a)
- B. Develop claim(s) and counterclaims fairly and thoroughly. (W.1b)
- C. Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims. (W.1c)
- D. Establish and maintain a formal style and objective tone. (W.1d; W.2e)
- E. Provide a concluding statement or section that follows from and supports the argument presented. (W.1e)

- C. Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a literary or informational text based on specific information in the text. (RL+RI.3)
- D. Determine the meaning of academic and domain-specific words and phrases as they are used in a text, including figurative language. (RL+RI.4; L.4,5,6)

supporting ideas, and provide an objective summary. (RI.2)

- C. Analyze how any genre of text makes connections among and distinctions between individuals, ideas, or events. (RL+RI.3)
- D. Determine the meaning of words and phrases as they are used in the text, including figurative, connotative, and technical meanings; analyze the impact of specific word choices on meaning and tone. (RL+RI.4; L.4,5,6)

- B. Determine the central ideas of a text, analyze their development, and provide an objective summary. (RI.2)
- C. Analyze a complex set of ideas or sequence of events and explain how specific individuals, ideas, or events interact and develop over the course of the text. (RL+RI.3)
- D. Determine the meaning of words and phrases as they are used in the text, including figurative, connotative, and technical meanings; analyze the impact of specific word choices on meaning and tone. (RL+RI.4; L.4,5,6)

## English Language Arts Graduation Standard 2

### READING INTERPRETATION:

Interpret, analyze, and evaluate appropriately complex literary and informational texts. (CCRA 7, 10)

#### Fifth-Grade Performance Indicators

- A. Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text. (RL+RI.1)
- B. Compare and contrast the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in two or more literary and informational texts. (RL+RI.5)
- C. Analyze multiple accounts of the same event or topic, noting important similarities and differences in the point of view they represent. (RL+RI.6)
- D. Analyze how visual and multimedia elements contribute to the meaning, tone, or beauty of a text. (RL.7)
- E. Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to

#### Eighth-Grade Performance Indicators

- A. Cite textual evidence that most strongly supports an analysis of what the text says explicitly, as well as inferences drawn from the text. (RL+RI.1)
- B. Compare and contrast the structure of two or more literary and informational texts and analyze how the differing structure of each text contributes to its meaning and style. (RL+RI.5)
- C. Determine an author's point of view, purpose, or rhetorical strategies in a text, analyzing how conflicting evidence and points of view impact the text, or how a character's point of view creates effects such as suspense or humor. (RI+RL.6)
- D. Evaluate the advantages and disadvantages of using different media to present a topic, idea, or literary work. (RL+RI.7)
- E. Delineate and evaluate the argument and

#### High School Performance Indicators

- A. Cite strong and thorough textual evidence to support an analysis of the text, including any applicable primary or secondary sources, and determine both explicit and implicit meanings, such as inferences that can be drawn from the text and where the text leaves matters uncertain. (RL+RI.1)
- B. Analyze how an author chose to structure a text and how that structure contributes to the text's meaning and its aesthetic and rhetorical impact. (RL+RI.5)
- C. Determine an author's point of view, purpose, or rhetorical strategies in a text, analyzing how style and content contribute to the power, persuasiveness, or beauty of the text. (RL+RI.6)
- D. Evaluate content and multiple sources of information presented in diverse media and formats to interpret literature, address a

# Design Criteria Chart

## Developing Content-Area Graduation Standards<sup>1</sup>

Criteria	Weaker Statements	Stronger Statements
<p><b>Content-Area Relevance</b>  <i>To what extent does the statement align with national and state standards? Is the statement central to understanding the content area?</i></p>	<ul style="list-style-type: none"> <li>• Are either too abstract (and therefore cannot be measured) or too specific (and therefore fail to address broadly applicable content-area skills and knowledge)</li> <li>• Are so detailed that they obscure their connection to higher-level cognitive skills</li> </ul>	<ul style="list-style-type: none"> <li>• Align with national, state, and/or local standards and frameworks</li> <li>• Combine several standards into one graduation standard</li> <li>• Use precise, descriptive language that clearly communicates what is essential to understanding the content area</li> </ul>
<p><b>Enduring Knowledge</b>  <i>To what extent does this statement provide students with knowledge and skills that will be of value beyond a particular point in time, such as when students take a test or complete the unit?</i></p>	<ul style="list-style-type: none"> <li>• Are limited to the scope and sequence of a textbook, resource, or program</li> <li>• Focus on factual content without connecting the statements to enduring cross-disciplinary and content-area skills</li> </ul>	<ul style="list-style-type: none"> <li>• Require students to develop an understanding of relationships among principles, theories, and/or concepts</li> <li>• Require students to develop and demonstrate skills and knowledge that will endure throughout their education, professional careers, and civic lives</li> </ul>
<p><b>Leveraging Learning</b>  <i>Does the statement describe knowledge and skills that can be applied across multiple disciplines?</i></p>	<ul style="list-style-type: none"> <li>• Describe topics that are only relevant to or applicable within a specific course or content area</li> </ul>	<ul style="list-style-type: none"> <li>• Address skills and knowledge that are relevant to and can be applied in all content areas and educational contexts, including real-world and outside-of-school settings</li> </ul>
<p><b>Cognitive Demand</b>  <i>What level of conceptual comprehension, knowledge acquisition, and skill development does the statement encourage?</i></p>	<ul style="list-style-type: none"> <li>• Require only basic recall and lower-level cognitive skills, such as identifying, defining, summarizing, or listing</li> <li>• Do not encourage the application of knowledge to diverse or novel problems and situations</li> </ul>	<ul style="list-style-type: none"> <li>• Require students to demonstrate higher-order cognitive skills, such as those described in the Revised Bloom's Taxonomy, Marzano's New Taxonomy, or Webb's Depth of Knowledge</li> <li>• Promote deeper comprehension of content and the acquisition of transferable skills such as reasoning, planning, interpreting, hypothesizing, investigating, or explaining</li> </ul>
<p><b>Assessment Facilitation</b>  <i>To what extent does the statement allow for a broad range of formative and summative assessments?</i></p>	<ul style="list-style-type: none"> <li>• Use descriptive language and verbs that are difficult to measure and assess</li> </ul>	<ul style="list-style-type: none"> <li>• Use descriptive language and verbs that facilitate reliable measurement and assessment practices</li> </ul>

<sup>1</sup>Based on the work of Larry Ainsworth, Doug Reeves, and the New Hampshire Department of Education's Course Level Competency Validation Rubric.



# Design Criteria Chart

## Defining Performance Indicators for Content-Area Graduation Standards<sup>1</sup>

Criteria	Weaker Statements	Stronger Statements
<p><b>Graduation-Standard Alignment</b>  <i>To what extent does the statement align with the relevant graduation standard? Is the statement central to understanding the standard as described?</i></p>	<ul style="list-style-type: none"> <li>• Are either too abstract (and therefore cannot be measured) or too specific (and therefore fail to address broadly applicable content-area skills and knowledge)</li> <li>• Are so detailed that they obscure their connection to the graduation standard</li> </ul>	<ul style="list-style-type: none"> <li>• Describe and define what students need to know and be able to do to demonstrate proficiency in and achievement of the content-area graduation standard</li> <li>• Use precise, descriptive language that clearly communicates what is essential to achieving the graduation standard</li> </ul>
<p><b>Enduring Knowledge</b>  <i>To what extent does this statement provide students with knowledge and skills that will be of value beyond a particular point in time, such as when students take a test or complete the unit?</i></p>	<ul style="list-style-type: none"> <li>• Are limited to the scope and sequence of a specific textbook, resource, or program</li> <li>• Describe only knowledge and skills that are relevant or unique to a specific unit</li> <li>• Are “nice to know” but not essential for students to learn if they are going to succeed in next unit, course, or grade level.</li> </ul>	<ul style="list-style-type: none"> <li>• Require students to develop and demonstrate skills and knowledge that will endure throughout their education, professional careers, and civic lives.</li> <li>• Answers the question: “What do we want students to remember, understand, and be able to do several years from now, perhaps long after they have forgotten the details?”</li> </ul>
<p><b>Cognitive Demand</b>  <i>What level of conceptual comprehension, knowledge acquisition, and skill development does the statement encourage? What depth of knowledge does this statement promote? Is the level of cognitive demand expected measurable?</i></p>	<ul style="list-style-type: none"> <li>• Require only basic recall and lower-level cognitive skills, such as identifying, defining, summarizing, or listing</li> <li>• Do not encourage the application of knowledge to diverse or novel problems and situations</li> </ul>	<ul style="list-style-type: none"> <li>• Require students to demonstrate higher-order cognitive skills, such as those described in the Revised Bloom’s Taxonomy, Marzano’s New Taxonomy, or Webb’s Depth of Knowledge</li> <li>• Promote deeper comprehension of content and the acquisition of transferable skills such as reasoning, planning, interpreting, hypothesizing, investigating, or explaining</li> <li>• Are measurable</li> </ul>
<p><b>Assessment Facilitation</b>  <i>To what extent does the statement allow for a broad range of formative and summative assessments?</i></p>	<ul style="list-style-type: none"> <li>• Suggest only limited options for assessing and demonstrating learning</li> <li>• Fail to describe in precise and understandable language what will be measured</li> <li>• Focus narrowly on factual recall and rote skills</li> <li>• Suggest that a single task or activity can be considered a valid demonstration of proficiency</li> </ul>	<ul style="list-style-type: none"> <li>• Help define the specific knowledge and skills that will be assessed and measured</li> <li>• Promote the assessment of deeper content comprehension and the acquisition of transferable skills</li> <li>• Promote multiple and varied options for students to demonstrate evidence of learning, particularly through performance assessments and body-of-evidence strategies such as portfolios</li> </ul>

<sup>1</sup>Based on the work of Larry Ainsworth, Doug Reeves, and New Hampshire Department of Education’s Course Level Competency Validation Rubric.





# Protocol

## Developing Graduation Standards

### PURPOSE

To distill the national or state standards in a content area to 5–8 graduation standards that will be required for high school graduation.

### TIME

3–4.5 hours

### ROLES

Facilitator, timekeeper, notetaker

### PROCESS

- A. Review the Proficiency-Based Learning Simplified graphic. The facilitator guides the group through the levels of the pyramid. The group discusses the degree to which each level impacts classroom practice and reporting measures. The facilitator reminds the group that the focus for this session is at the “graduation standard” level. (15 min.)
- B. Review the Design Criteria Chart independently and then discuss as a group. (15 min.)
- C. Review national or state standards in a specific content area. If desired, review sample graduation standards at this time also. Reviewers should circle, mark, or connect standards that they believe fit the criteria of a graduation standard. It is appropriate to consider combining statements, creating statements from headings, or making slight revisions to existing statements to clarify the local graduation standard. (60 min.)
- D. Share the identified standards in round-robin fashion until all possible graduation standards have been stated. Write the proposed standards on chart paper or within a shared online document. (10–15 min.)
- E. Discuss as a group any overlapping standards. Refer to the Design Criteria Chart as needed. (30–60 min.)
  - Are any of the standards too narrow or too broad to be graduation standards?
  - Are there any standards that could be combined without losing their meaning?
  - Do the proposed graduation standards remain aligned to the relevant national or state standards?
- F. If there are more than 5–8 graduation standards, use the Design Criteria Chart to discuss as a group any standards that do not meet more than one of the criteria for graduation standards. Eliminations from the list should be discussed and considered collectively. (30–60 min.)
- G. Review the proposed graduation standards, and discuss any concerns or questions. (20–30 min.)
- H. Debrief the process. What worked well? What could we improve on for next time? (5 min.)
- I. Next steps in the process: Small groups identify performance indicators associated with each graduation standard, and align assessments to performance indicators and/or graduation standards.

# Protocol Developing Performance Indicators

## PURPOSE

To identify 5–10 performance indicators for each content area graduation standard

## TIME

3–4 hours

## ROLES

Facilitator, timekeeper, notetaker

## MATERIALS

- A. Proficiency-Based Learning Simplified graphic
- B. Locally developed content-area graduation standards
- C. National- and state-level standards documents
- D. Sample graduation standards and performance indicators for the content area
- E. Cognitive taxonomies (e.g., Revised Bloom's Taxonomy, Marzano's New Taxonomy, or Webb's Depth of Knowledge)
- F. Design Criteria Chart
- G. Chart paper and markers or projector and laptop(s)

## PROCESS:

- A. Review your locally developed content-area graduation standards to confirm agreement on the content and language. Review the Proficiency-Based Learning Simplified graphic to clarify for the group that the focus of this session is at the Performance Indicator level. Then, determine how this phase of the process will be conducted. It can be done in small groups whereby each group works on one content-area graduation standard and aligns the supporting performance indicators to that graduation standard. It can also be done collectively. (15 min.)
- B. Review the Design Criteria Chart independently and then discuss as a group. (15 min.)
- C. Using national and/or state standards documents in a specific content area, reviewers should mark performance indicators that they believe are essential components of the particular graduation standard they are working on. It is appropriate to reference the sample set of performance indicators available by content area. Reviewers should feel free to combine or revise performance indicators for clarity and proper alignment to the relevant graduation standard. Special attention should be paid to aligning the cognitive verbs of performance indicators with those of the graduation standard. Refer to one of the cognitive taxonomy reference tools. (60 min.)
- D. Share the identified performance indicators in round robin fashion until all possible performance indicators for the relevant graduation standard have been stated. Write the proposed performance indicators on chart paper, project for the group to view, or view within a shared online document. (10–15 min.)
- E. If there are more than ten performance indicators, discuss as a group any that do not meet one or more criteria for performance indicators as suggested in the Design Criteria Chart. Could any of the performance indicators be combined without losing meaning and value? Eliminations from the list should be discussed and considered collectively. (10–15 min.)

