Mastery-Based Learning: What, Why, and How It Can Help Student Engagement and Achievement

March 23, 2016
Cromwell, CT
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From Great Schools Partnership
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Outcomes

Articulate the core principles of mastery-based learning.
Outcomes

Conceptualize a framework for mastery-based learning.
Outcomes

Consider a school’s readiness for mastery-based learning.
Agenda

Welcome, introductions, and overview

Establishing a Learning Community

Mastery-Based Learning 101

Mastery-Based Learning Panel

Global Best Practices

League of Innovative Schools

Closing
Who’s In the Room?
I’m a classroom educator.

I am a building administrator.

I am a district administrator.

I have another role within our educational system.
Pair off

Introduce Yourself

What are you looking forward to today?
My whole school is new to mastery-based learning but I have some experience in it.

My whole school is new to mastery-based learning, as am I.

I’m curious about MBL but not sure I’m ready to plan and implement.

I’m curious about MBL and am ready to dive in.
Pair off

Introduce Yourself

What is one question you have about MBL?
Is a non-profit support organization based in Portland 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
We Believe

In equitable, personalized, rigorous learning for all students leading to readiness for college, careers, and citizenship
We Believe

That schools must simultaneously attend to policy, practice, and community engagement.
We Believe

School improvement is **context-based**, not one-size fits all.
Resources

www.greatschoolspartnership.org/ct-mbl-2016
Establishing Our Learning Community
COMPASS POINTS

PROCESSSES

Action
Structure
Caring
Meaning
Norms

- Respect time
- Monitor “air time”
- Listen well
- Respect differences
- Support a culture of possibility
- Freely attend to personal needs
- Foster good humor
- Maintain confidentiality

*What else do you need in order to do your work well this week?*
How Good Is Good Enough?
Mastery is a student’s ability to transfer learning in and/or across content areas.
Text-Based Seminar

• Focus on the framing question
• Listen actively
• Build on what others say
• Share the air
• Refer to the text; challenge others to go to the text
• Ask for clarification + consider implications
How might mastery-based learning support the transfer of learning?

What shifts are critical within an educational system to realize transfer of learning?
Mastery-Based Learning
Is not a stand-alone intervention
Is a suite of practices resulting from the thoughtful combination of best practices currently used by expert educators with solid support in the literature
10 Principles Of Mastery-Based Learning
Applying the Principles

Review the ten principles and identify the principle that:

- you feel most *confident* about
- *challenges* you the most
- *excites* you the most
TURN + TALK

What do you think **all students** should know or be able to do to be college, career, and citizenship ready?
Analyze how people influence government and work for the common good. (MLR B2 D)
English Language Arts
Speaking + Listening

Evaluate a speaker’s point of view, reasoning, and use of evidence and rhetoric. (SL.3; L.3)
Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment. (5-LS2-1)
Learning Standards

1. All learning expectations are clearly and consistently communicated to students + families.

2. Student achievement is evaluated against common learning standards and performance expectations that are consistently applied to all students.
EQUALITY vs EQUITY
Assessment Pathways Simplified
A Great Schools Partnership Learning Model

We believe that reliability results from the careful alignment of demonstrations tasks and instruction with intended learning outcomes. Comparability is possible when teachers assess student work with task-neutral common scoring guides and have time to calibrate their understanding and use. The graphic below represents five general learning pathways and how they can be assessed. While each of these has instructional value, only the first four will lead to greater comparability over time because they are assessed using common scoring criteria. We believe that these pathways are valuable and represent the many ways educators are personalizing learning for students in a proficiency-based learning system.

LESS Student Choice in Learning

RELIABLE and COMPARABLE results across STUDENTS, COURSES, SCHOOLS, DISTRICTS, or STATES

MORE Student Choice in Learning

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## Scoring Guides

Scoring guides are comprised of criteria that describe levels of proficiency for each performance indicator.

<table>
<thead>
<tr>
<th>Performance Indicators</th>
<th>Does Not Meet</th>
<th>Partially Meets</th>
<th>Meets</th>
<th>Exceeds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students will be able to develop appropriate research questions. (CCSS.ELA-Literacy.WHST.11-12-7)</td>
<td>I can <strong>list</strong> some specifics about a topic that would help develop my understanding</td>
<td>I can <strong>identify</strong> broad questions that are relevant to my studies and focus my research</td>
<td>I can <strong>construct</strong> open-ended questions that build on one another and require evidence and support</td>
<td>I can <strong>analyze</strong> my own research questions to refine them based on my earlier questions and learning</td>
</tr>
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</table>
TURN + TALK

Read an example of a pathway with someone else.
Which pathway does the example represent?
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3. All forms of assessment are standards-based and criterion-referenced

4. Formative assessments measure learning progress during the instructional process

5. Summative assessments - which are integrated tasks requiring transfer of knowledge and skills, application, and performance in novel settings
Grading + Reporting

If a student has a C in a class, what are all of the things it could mean?
<table>
<thead>
<tr>
<th>ELA</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>73</td>
</tr>
<tr>
<td>Q2</td>
<td>70</td>
</tr>
<tr>
<td>Q3</td>
<td>70</td>
</tr>
<tr>
<td>Q4</td>
<td>68</td>
</tr>
<tr>
<td>Final</td>
<td>70.25</td>
</tr>
</tbody>
</table>
Reading Comprehension
Reading Interpretation
Writing: Argument
Writing: Informative + Narrative
Writing Process
Writing: Research
Speaking + Listening: Discussion
Speaking + Listening: Presentation
Bucksport High School
9th graders (class of ’17)
“When teachers utilized standards-based grading methods, not only did the number of As and Bs increase, but the rate of passing the state assessment among students who earned these grades approximately doubled as compared to the two traditional grading cohorts.”

6. Academic progress and achievement are monitored and reported separately.

7. Academic grades communicate learning progress and achievement.

8. Students are given multiple opportunities to improve their work when they fail to meet expected standards.
Instruction

• What ways do you learn best?
• What are you interested in most?
• What aspirations do you hold?
Equity demands different resources, approaches, and strategies for different students.
From Standards to Units

- Standards
- Scoring Criteria
- Performance Indicators
- Curriculum Mapping
- Designing Summative Task
- Unit Design
- Instructional Design
- Instruction
- Formative Assessment
- Supports/Interventions
- Summative Assessment
- Reporting Learning
- Scoring-with criteria
- Reflection + Refinement
- Supports/Interventions

Students attempt Summative Assessment

Reporting Learning
Supports/Interventions

From Standards to Units

Standards

Performance Indicators

Scoring Criteria

Curriculum Mapping

Designing Summative Task

Unit Design

Instructional Design

Instruction

Instruction, Feedback, Evaluation

Design for Learning

School-wide Planning

Reporting, Reflection, Refinement

Reporting Learning

Scoring-with criteria

Students attempt Summative Assessment

Supports/Interventions

Formative Assessment

Reflection + Refinement

Reporting Learning

Scoring-with criteria

Students attempt Summative Assessment

Supports/Interventions

Formative Assessment

Reflection + Refinement
Instructional Strategies

9. Students can demonstrate learning progress and achievement in multiple ways

10. Students are given opportunities to make important decisions about their learning
Mastery-Based Learning Framework
(Un)Common Terms for “Standards”

- Descriptors
- Graduation Standard
- Learning Targets
- Priority Standard
- Power Standards
- Learning Objectives
- Benchmarks
- Proficiency Standards
- Competencies
- Performance Indicators
- Measurement Targets
- Mastery Objectives
Cross-Curricular Graduation Competencies define a set of significant learning concepts that are not within the domain of a single content area, but are embedded in multiple areas. These are drawn from the Mathematical Practices of the Common Core, the Characteristics of Students Who are College and Career Ready from the ELA Common Core, and associated Connecticut state standards.

Content-Area Graduation Competencies define a set of significant learning concepts in each content area. These are drawn from the Math Common Core and English/Language Arts Common Core and associated Connecticut state standards.

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<tr>
<td>YES</td>
<td>Transcript and Report Cards</td>
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<tr>
<td>YES</td>
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<td>Content-Area Cluster Competencies&lt;br&gt;5-8 competencies per content area</td>
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<td>NO</td>
<td>Progress Reports</td>
<td>Performance Indicators&lt;br&gt;5-10 indicators per content-area competency</td>
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<td>NO</td>
<td>Feedback to Student</td>
<td>Unit-Based Learning Objectives&lt;br&gt;Guided by essential questions, teachers use daily learning targets to create progressions that move students toward the demonstration of performance indicators</td>
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Graduation Standard

Performance Indicator

Learning Target
A Graduation Standard Is...

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

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

Is measurable
A Performance Indicator

In aggregate with other, related performance indicators, measures whether a student has met the graduation standard.
Learning Targets Are...

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.
The Envelope Please …

• Put all strips on the table
• Attempt to categorize the statements
  • Cross-curricular Skills
  • Graduation Standards
  • Performance Indicators
  • Learning Targets
### Mastery-Based Learning Simplified

*Cross-Curricular Graduation Competencies* define a set of significant learning concepts that are not within the domain of a single content area, but are embedded in multiple areas. These are drawn from the Mathematical Practices of the Common Core, the Characteristics of Students Who are College and Career Ready from the ELA Common Core, and associated Connecticut state standards.

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GLOBAL BEST PRACTICES

An Internationally Benchmarked Self-Assessment Tool for Secondary Learning
1.4 STANDARDS-BASED EDUCATION

STEP 1 >> READ THE PERFORMANCE DESCRIPTIONS

1 INITIATING

Some efforts have been made to align coursework with career and college-ready learning standards, but in practice many teachers continue to use lessons that are unaligned or outdated. The school uses a standardized credit system based on seat time, letter grades, number averaging, and other traditional practices to measure academic progress and determine readiness for graduation. There is a great deal of variation from classroom to classroom in grading practices and standards. Students are often unaware of learning expectations for courses and lessons, and they rarely receive descriptive feedback on assignments. High-stakes external assessments often unilaterally drive instruction and lesson design.

3 DEVELOPING

School-wide curricula and instruction have been aligned with common learning standards, but this effort has not been systematic or systemic. District and school leaders have engaged in conversations about adopting a true standards-based system, and the principal and teacher-leaders have visited schools that are using effective standards-based practices. Teachers are employing multiple formative assessment strategies in the classroom, and academic support is being provided to ensure that struggling students have learned material before they move on to the next lesson. Some departments have developed common rubrics to enhance the consistency of grading and reporting, but this practice has not been embraced by all teachers or institutionalized school-wide. In some cases, learning expectations remain unclear and many students are still unaware of their own learning strengths and weaknesses or which learning standards teachers are addressing.

5 PERFORMING

The school has publicly committed to becoming a true standards-based learning community, and graduation policy has been modified to require all students to demonstrate mastery of learning standards and high levels of college and career readiness before receiving a diploma. The faculty has prioritized learning standards in every content area so that the most essential content, skills, and habits of mind are covered in depth before teachers move on to additional material and standards. Multiple assessments are used to determine that students have mastered what they have been taught, and underperforming students are provided with additional instructional time, academic support, and alternative learning options to ensure that they are able to learn and demonstrate achievement in ways that work best for them. All teachers use common scoring guides that provide detailed descriptions of required learning proficiencies at each developmental stage and expected level of performance.

STEP 4 >> SCORE YOUR SCHOOL

Place an X on the scale below to indicate your school’s performance in this dimension.

☐ NOT Addressed 1 INITIATING 2 3 DEVELOPING 4 5 PERFORMING
1.4 GLOBAL BEST PRACTICES

STEP 1 >> READ THE PERFORMANCE DESCRIPTIONS

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<th>DEVELOPING</th>
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<td>School-wide curriculum aligned with common effort has not been fully adopted by the principal and teachers. Efforts to adopt developmentally appropriate strategies in the classroom are being provided to enhance learning material by some teachers. Some departments have rubrics to enhance reporting, but this process is not provided by all teachers or in all areas. In some cases, learning is more focused on grades than on learning content. Many students are still being assessed on strengths and weaknesses, and teachers are addressing these issues at this level.</td>
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STEP 4 >> SCORE YOUR SCHOOL

Place an X on the scale below to indicate your school's performance in this dimension.

1. NOT Addressed
2. Initiating
3. Developing
4. Performing
5. Mastering
Global Best Practices Excerpt

• Independently read the three dimensions

• In **GREEN**, highlight areas of strength at your school

• In **ORANGE**, highlight areas of growth at your school
Global Best Practices Excerpt

- What do you notice?
- What do you wonder about?
- What might be a next step?
How might this self-assessment tool inform your school improvement work and design of MBL?
Founded in 2011, the **League of Innovative Schools** is a regional professional learning community for schools.

All participating schools are part of a growing network of learning institutions working to strengthen their programs, exchange professional expertise, and create better learning opportunities for their students.
Founded in 2011, the League of Innovative Schools is a regional professional learning community for schools. Membership is open to any New England secondary school—including charter schools, private schools, and career-and-technical institutions—committed to educational equity, student-centered learning, and ongoing improvement. All participating schools will become part of a growing network of learning institutions working to strengthen their programs, exchange professional expertise, and create better learning opportunities for their students.

HOW IT WORKS

The League of Innovative Schools:

1. Connects educators. We know that collaboration and strong professional relationships motivate, accelerate, and sustain school improvement, and that school leaders and teachers are more effective when they work together. The League of Innovative Schools brings together educators working to build stronger communities, create more energized learning environments, and get better results for students.

2. Spreads good ideas. Educators are an endless source of inspiration and innovation for other educators. When good ideas are shared, and when educators discuss what works and what doesn’t, our schools improve, teachers are more professionally fulfilled, and students graduate better prepared for life. The League of Innovative Schools is forum for school leaders to share and create solutions for mutual challenges.
Questions?
Thank You

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