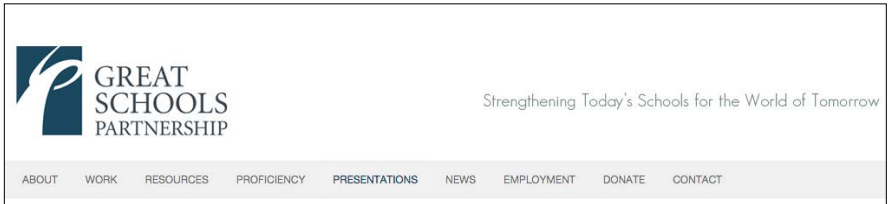
GREAT SCHOOLS PARTNERSHIP

CAPSS
LEADERSHIP FOR THE FUTURE OF LEARNING

CT Superintendent's
Community of Practice

Laying the Foundations for Mastery-Based Learning

December 15, 2016



www.greatschoolspartnership.org/presentations

Series Outcomes

- Build capacity to implement mastery-based learning at scale across a school district
- Explore and share ideas and strategies underway or planned in alignment with implementation
- Create a network of like-minded educators for political and cultural support

Meeting Dates

- **December 15, 2016**
- February 7, 2017
- April 27, 2017
- June 20, 2017

All meetings will be held at the Connecticut Association of Schools

Agenda

- Background on the Great Schools Partnership
- Who Gets a Driver's License?
- Global Best Practices
- Design Levers to Improve Student Learning—and What Must We Rethink
- Shifting Concepts

GREAT SCHOOLS PARTNERSHIP

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

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

Lets Talk Drivers' Licenses

A Story in Design History

Automobiles were a new technology fitting into an old system

Hey, maybe we need some rules for driving…

And maybe we need some way for people to show they are ready to drive…

Unpacking these Assessments

The written test:

- is criterion-referenced
- provides multiple opportunities
- isn't averaged

Unpacking these Assessments

The road test:

- is criterion referenced—on different evidence
- is a performance assessment
- provides multiple opportunities
- isn't averaged

Creating Support Pathways

- Driver's education courses
- Classes are for support not demonstration
- Not required after age 20
- Offered through multiple venues

What are the design beliefs that underlie this assessment structure?

Design Beliefs

- Common learning standards
- Demonstration of knowledge and skills
- Past performance doesn't indicate current capacity
- Evidence-based
- Human scoring by multiple people
- Multiple learning pathways
- Age related but not defined
- Variable time to demonstrate

If we followed the design beliefs of our schools, what would be different?

If School Designed

- Different standards for different students
- Initial failures averaged with later success
- No road test
- Single pathway
- Organized by age cohorts
- Centralized scoring
- Predetermined testing time

If both schools and drivers' tests are learning and demonstrating experiences, **why are they so different?**

Historic School Design

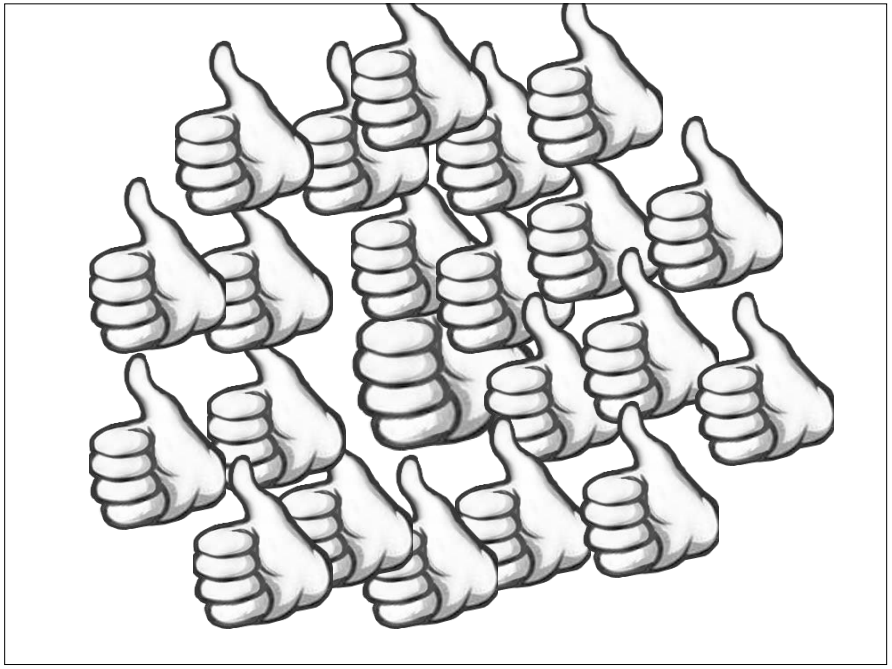
- Measurement of Time = Learning
- Equal Time = Equity
- Grade averaging provides reliable data
- Knowledge should be isolated by content
- Learners can integrate knowledge without assistance
- Age determines capacity to learn—and all capacities are the same by age

Historic School Design

- One pathway can work for everyone
- Reliability of judgment is more important than trustworthiness of data
- Learning happens in predetermined chunks of time
- Schools should serve as child care
- No school in the summer

Recent School Design

- The pace of student learning creates student agency over learning
- Student individuality outweighs the importance of engagement with other students or teachers
- More technology is better
- Better content knowledge = better teaching
- More of the same will create deeper learning



Bad News
&
Good News

NEW ENGLAND
SECONDARY SCHOOL
CONSORTIUM

GLOBAL BEST PRACTICES
2ND EDITION

An Internationally Benchmarked
Self-Assessment Tool
for Secondary Learning

Global Best Practices

- Developed for the New England Secondary Schools Consortium in 2011; 2nd edition published in 2016
- Supported by meta-analyses, comprehensive project findings, and focused investigations
- Included common characteristics of high-performing schools in U.S. and abroad
- Reviewed + refined by members from all five LIS member schools
- Comprised of 4 strands + 22 dimensions

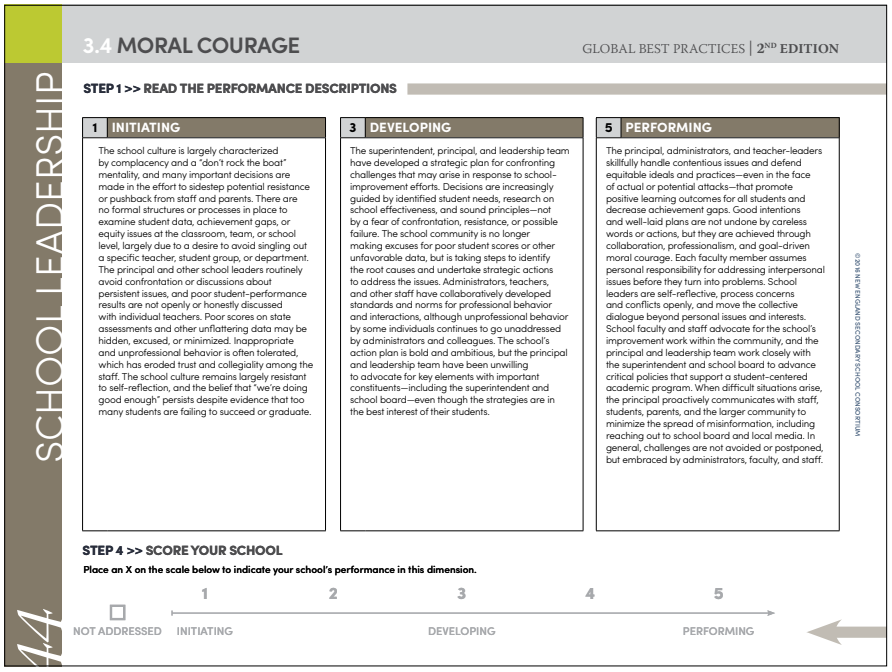
Global Best Practices

Introducing a New Strand

Strand 4: School District

4.1: Role of the School Board

4.2: District Administrators



SCHOOL LEADERSHIP

3.4 MORAL COURAGE

GLOBAL BEST PRACTICES | 2ND EDITION

STEP 1 >> READ THE PERFORMANCE DESCRIPTIONS

1 INITIATING

The school culture is largely characterized by complacency and a "don't rock the boat" mentality, and many important decisions are made in the effort to sidestep potential resistance or pushback from staff and parents. There are no formal structures or processes in place to examine student data, achievement gaps, or equity issues at the classroom, team, or school level, largely due to a desire to avoid singling out a specific teacher, student group, or department. The principal and other school leaders routinely avoid confrontation or discussions about persistent issues, and poor student-performance results are not openly or honestly discussed with individual teachers. Poor scores on state assessments and other unflattering data may be hidden, excused, or minimized. Inappropriate and unprofessional behavior is often tolerated, which has eroded trust and collegiality among the staff. The school culture remains largely resistant to self-reflection, and the belief that "we're doing good enough" persists despite evidence that too many students are failing to succeed or graduate.

3 DEVELOPING

The superintendent, principal, and leadership team have developed a strategic plan for confronting challenges that may arise in response to school-improvement efforts. Decisions are increasingly guided by identified student needs, research on school effectiveness, and sound principles—not by a fear of confrontation, resistance, or possible failure. The school community is no longer making excuses for poor student scores or other unfavorable data, but is taking steps to identify the root causes and undertake strategic actions to address the issues. Administrators, teachers, and other staff have collaboratively developed standards and norms for professional behavior and interactions, although unprofessional behavior by some individuals continues to go unaddressed by administrators and colleagues. The school's action plan is bold and ambitious, but the principal and leadership team have been unwilling to advocate for key elements with important constituents—including the superintendent and school board—even though the strategies are in the best interest of their students.

5 PERFORMING

The principal, administrators, and teacher-leaders skillfully handle contentious issues and defend equitable ideals and practices—even in the face of actual or potential attacks—that promote positive learning outcomes for all students and decrease achievement gaps. Good intentions and well-laid plans are not undone by careless words or actions, but they are achieved through collaboration, professionalism, and goal-driven moral courage. Each faculty member assumes personal responsibility for addressing interpersonal issues before they turn into problems. School leaders are self-reflective, process concerns and conflicts openly, and move the collective dialogue beyond personal issues and interests. School faculty and staff advocate for the school's improvement work within the community, and the principal and leadership team work closely with the superintendent and school board to advance critical policies that support a student-centered academic program. When difficult situations arise, the principal proactively communicates with staff, students, parents, and the larger community to minimize the spread of misinformation, including reaching out to school board and local media. In general, challenges are not avoided or postponed, but embraced by administrators, faculty, and staff.

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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 2 3 4 5

NOT ADDRESSED | INITIATING | DEVELOPING | PERFORMING

Unpacking GBP

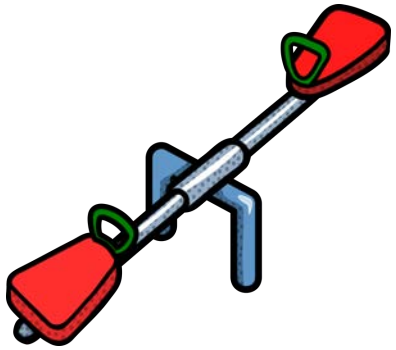
In groups of 2 or 3, choose one of the dimensions. Then individually

- read the three description levels
- underline areas not attended to
- circle areas of accomplishment

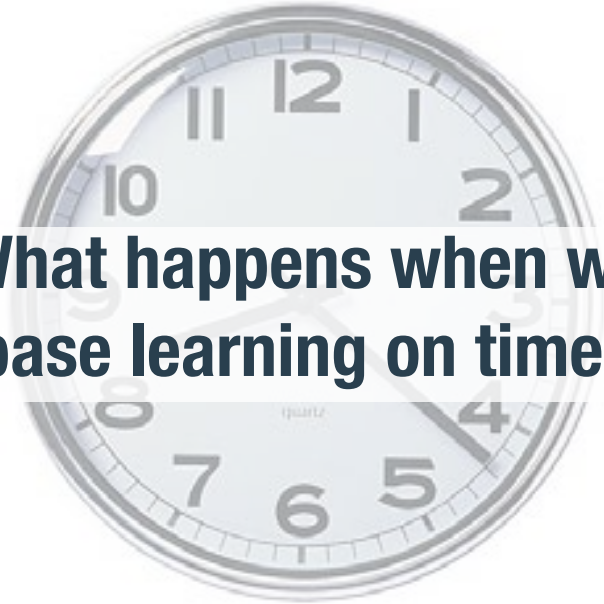
Then as a group

- discuss evidence for your choices
- discuss student results
- "score" your efforts

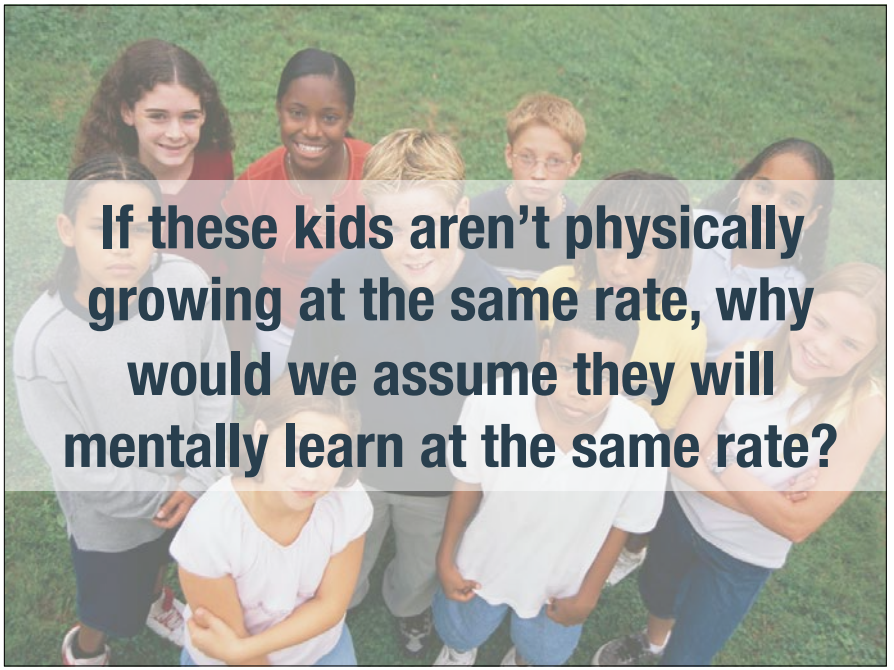
5 Design Levers to Achieve Alignment with GBP



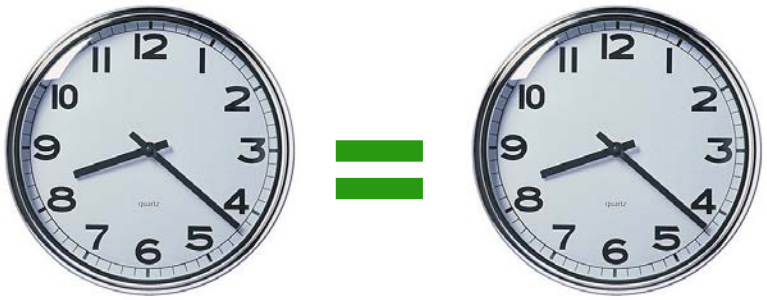
1. Emphasize Learning Over Time



What happens when we base learning on time?



If these kids aren't physically growing at the same rate, why would we assume they will mentally learn at the same rate?



We assume equity by giving every student the same time

Practice makes perfect…

	STUDENT 1	STUDENT 2	STUDENT 3	STUDENT 4
First Try	F	A	C	A
Second Try	D	B	C	A
Third Try				
Fourth Try				
Fifth Try	A	F	C	A
Final Grade	**C**	**C**	**C**	**A**

…except in school grading

Quick Write: What do we need to rethink?

What do we need to rethink?

- Credits based on time in class
- School day and school year
- Age cohorts
- Averaging quarter grades for end-of-year results

2. Value Equity over Competition

MASTERY-BASED LEARNING

Is not a stand-alone intervention

MASTERY-BASED LEARNING

Is a suite of practices resulting from the thoughtful combination of best practices currently used by expert educators with solid support in the literature

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.

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.

Required *for* Graduation	Reporting Method		Assessment Method
YES	Transcript *and* Report Cards	**Cross-Curricular** Graduation Competencies 5-8 school-wide competencies	**Demonstration by Body of Evidence** Portfolios, exhibitions, and other culminating demonstrations of learning are assessed
YES	Transcript *and* Report Cards	**Content-Area** Cluster Competencies 5-8 competencies per content area	**Verification and Proficiency** Student progress toward the achievement of competencies is determined and reported
NO	Progress Reports	**Performance Indicators** 5-10 indicators per content-area competency	**Common School-Wide Assessments** Common summative assessments ensure greater consistency in the evaluation of student learning
NO	Feedback *to* Student	**Unit-Based Learning Objectives** Guided by essential questions, teachers use daily learning targets to create progressions that move students toward the demonstration of performance indicators	**Formative Teacher Assessments** Ongoing formative assessment is used to evaluate student learning progress

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Graduation Competency

Performance Indicator

Learning Objective

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A Graduation Competency Is...

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

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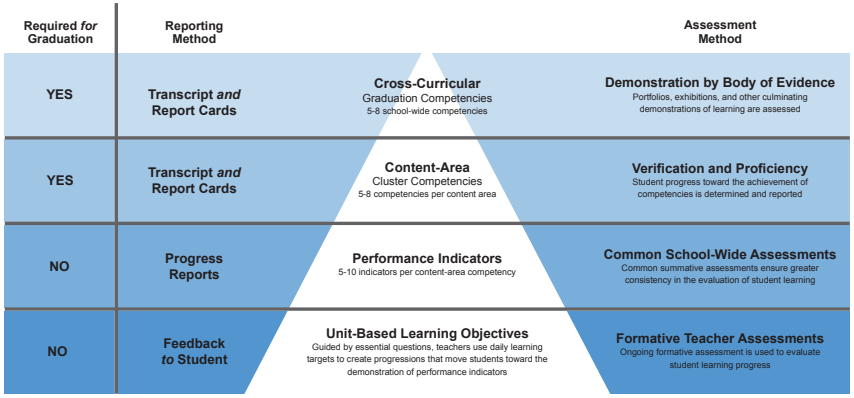

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A Performance Indicator

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

Students can demonstrate their performance over time.

A Performance Indicator

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

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Learning Objectives 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.

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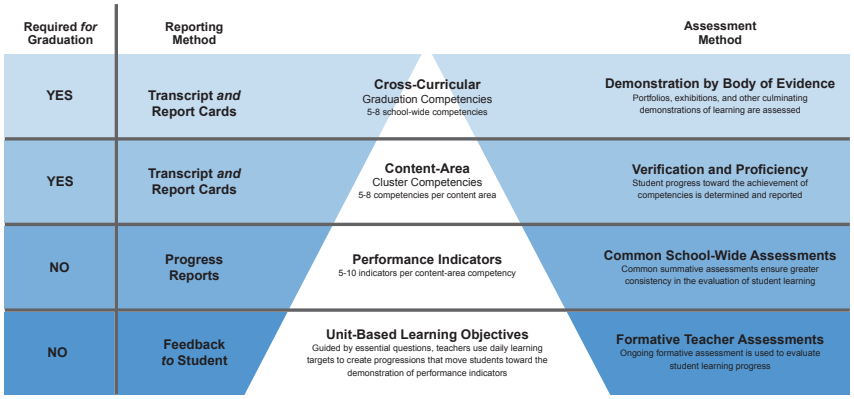

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10 Principles Of Mastery-Based Learning

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

Assessment Practices

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

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.

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

Silently read "Ten Principles of Mastery-Based Learning"

Identify one sentence, one phrase, and one word

"Turn and Talk" with a neighbor and share your sentence, phrase, and word and why these pieces are meaningful to you

What do we need to rethink?

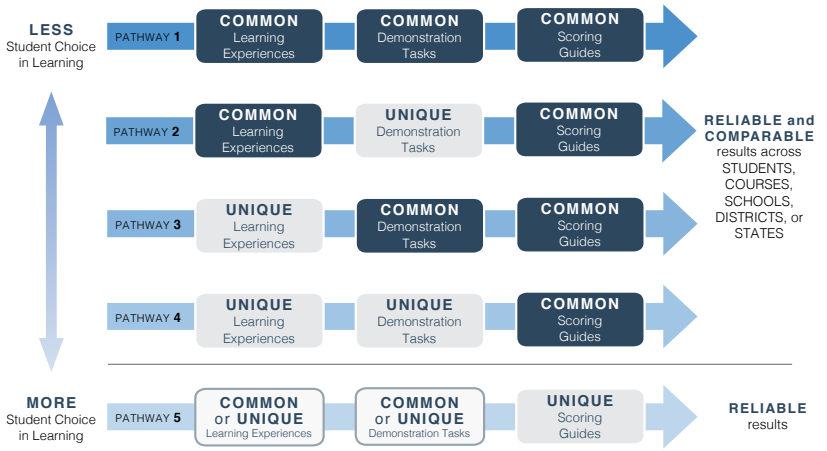
- Rank in Class
- Tracking
- Honors recognition
- Activities at graduation

3. Value Evidence Rather than Assessments

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.



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Crafting Scoring Criteria:

Design Guide- 5 Components

Scoring criteria:

- Are **task neutral**
- Are aligned with the **level of cognitive demand** in the Performance Indicator
- Include **all elements** of the Performance Indicator
- Describe **complexity** rather than frequency
- Focus on **what students can do** rather than deficiencies

Avoid Terms

Focused on Frequency

- **Frequently**
- **Reliably**
- **Rarely**
- **Never**

Use Terms
Focused on Cognitive Demand

- **Create**
- **Explain**
- **Recognize**
- **Describe**

Designing Scoring Criteria
Sample

1	2	3	4
I can describe linear and exponential functions as increasing/growth or decreasing/decay.	I can recognize how a linear or exponential function must change for a particular problem.	I can explain the starting value and the change factor for a linear and exponential function.	I can create models for real world problems in terms of linear and exponential functions
Describe	Recognize	Explain	Create

Creating a Rubric for a Summative Assessment

Performance Indicator	Emerging	Developing	Accomplished	Exemplary
Use the periodic table as a model to predict the relative properties of elements based on the patterns of electrons in the outermost energy level of atoms (HS-PS1-1)		Student is able to locate an element on the periodic table and identify the number of electrons in the outermost energy level.	Student is able to use the periodic table to accurately predict relative physical and chemical properties of elements. Student is able to describe the relationship between the patter of electrons and other characteristics of that element.	Student is able to analyze observed relative physical and chemical properties of elements and classify them appropriately in the periodic table.
Construct and revise an explanation for the outcome of a simple chemical reaction based on the outermost electron state of atoms, trends in the periodic table, and knowledge of the patterns of chemical properties. (HS-PS-1-2)		Student is able to determine the [illegible] element's location on the periodic table	Student is able to use their knowledge of the periodic table to predict [illegible] of simple reactions. Student is able to explain the outcomes by explicitly referencing the periodic table and its inherent patterns.	Student is able to compare the results of different chemical reactions and explain the differences in outcomes by explicitly referencing the periodic table and its inherent patterns such as outermost electrons, trends, and properties of reactants.
B. Use evidence and logic appropriately in communication	Recognizes ideas, concepts or concepts but does not use reasoning to generate a clear claim.	[illegible] analyzes or compares the information from these sources.	Analyze and integrate carefully selected pieces of the intended work, analyzing or comparing the information from these sources	Apply evidence in a novel or unfamiliar situation to design a model or solution.

Science Performance Indicator

Science Performance Indicator

Cross-Curricular Performance Indicator

Task: Creating Scoring Criteria

Graduation Competency: Collaboratively and independently research, present, and defend discipline-based processes and knowledge from civics/government, economics, geography, and history in authentic contexts.

A. 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.

B. Evaluate various explanations and authors' differing points of view on the same event or issue, citing specific textual evidence from primary and secondary sources to support analysis

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B. Evaluate various explanations and authors' differing points of view on the same event or issue, citing specific textual evidence from primary and secondary sources to support analysis.

What do we need to rethink?

- Single learning pathways
- Assessment hoops
- Homework
- Combining academic grades & habits of work
- Using assessments to control student behavior
- Athletic eligibility

4. Operate Accountability at Higher Levels of Rigor

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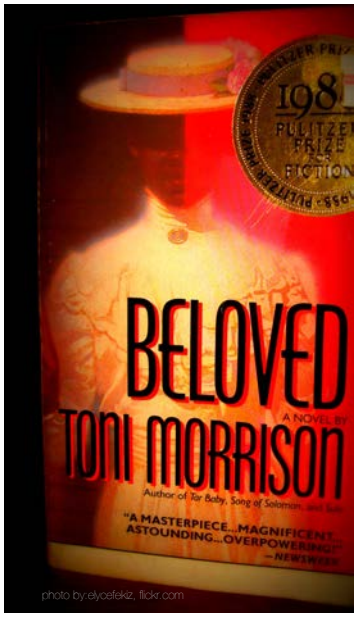


What do we need to rethink?

- Assuming all standards are equal
- What learning is truly important for all students
- Support and intervention strategies
- Special Education

5. Prioritize Collaboration Over Pace

The three most important learning aids in the classroom are…

The three most important learning aids in the classroom are…

Teachers

The three most important learning aids in the classroom are…

Students

The three most important learning aids in the classroom are…

Teaching Materials

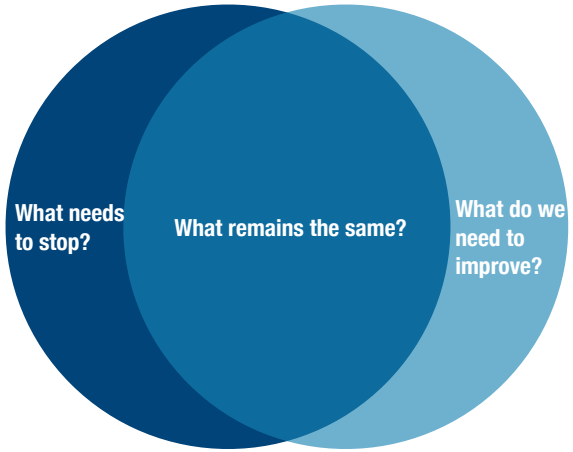
What happens when we prioritize student pace over everything else?

Teaching Materials

What do we need to rethink?

- Isolated on-line learning
- How to create inclusive instructional strategies
- Building student agency over compliance

SHIFTING CONCEPTS



Preparation for February

- Shining Moments
- Think of a wonderful learning experience or moment
- Describe it to 2 or 3 colleagues
- Together, identify the key characteristics of these moments

Preparation for February

- Keep a brief "log"
- Note two things: a) strong examples of practice that align with the characteristics we have identified; and b) instances where you saw or could see the potential for two or more learning pathways leading to the same outcomes
- Come to February prepared to share

Meeting Dates

- December 15, 2016
- **February 7, 2017**
- April 27, 2017
- June 20, 2017

All meetings will be held at the Connecticut Association of Schools

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THANK YOU

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