

A summary of the Council's thinking about the role rigor plays in our classrooms and in preparing our students to become responsible, contributing citizens in a changing global community.\*

# Thinking About Rigor in Brighton

Brighton Curriculum Council.  
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*\*From Brighton's mission statement*

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## Introduction

*21<sup>st</sup> Century Classrooms. Problem-Based Learning. Prioritized Standards. Writing To Learn. Inquiry-Based Learning. Formative Assessment. Response to Intervention. Writing Process. Unit Design. Schoology. Balanced Assessment. Next Generation Standards. The Social Studies Framework. Habits of Mind. Standards-Based Grading.* You most likely are familiar with one or more of these foci that are influencing our work with students. With so many different options to explore, how do we ensure the expectations for learning remain high for ALL students? This year Curriculum Council took steps to answer that question by developing a Brightonized definition of rigor.

We began the work by exploring our own beliefs about rigor, only to find that, as a mixed stakeholder group, we had very different notions of what rigor was and what its implications for curriculum, instruction and assessment were. We then looked to the experts and learned that while they each had a slightly different take on rigor there were many commonalities. The following summarizes what we learned in hopes that, as you explore your areas of expertise, plan your instruction, and support student learning you think about how ***rigor for ALL students*** fits into your work and the extent to which we are holding ALL students to the high standards we define.

Included here you will find:

1. A definition of what rigor is and what it isn't
2. What the teacher and student do related to creating a Classroom Environment, Curriculum, Instruction and Assessment involving rigor
3. Documents Curriculum Council used to guide our work
4. Resources to support deeper thinking about rigor
5. Ideas for how you could use the above to support your reflection and refinement of practice

## A Simple Definition

<b>Rigor is...</b>	<b>Rigor is not...</b>
<ul style="list-style-type: none"> <li>• a goal for all students that assumes high expectations for all</li> </ul>	<ul style="list-style-type: none"> <li>• withheld from students until they are ready; only for the more capable students</li> </ul>
<ul style="list-style-type: none"> <li>• working to understand content that is complex, ambiguous, provocative or emotionally challenging (8)</li> <li>• using content and skills to develop conceptual understanding</li> </ul>	<ul style="list-style-type: none"> <li>• memorizing facts;</li> <li>• more “busy work” for homework</li> <li>• following a formula; repeating steps of a process</li> <li>• one right answer</li> <li>• surface level knowledge</li> <li>• more work – reading, assignments or content</li> </ul>
<ul style="list-style-type: none"> <li>• a focus on constructing meaning</li> </ul>	<ul style="list-style-type: none"> <li>• focused on task completion</li> </ul>
<ul style="list-style-type: none"> <li>• transferring understanding to new situations</li> <li>• exploration of authentic; real world issues/concerns/problems</li> </ul>	<ul style="list-style-type: none"> <li>• students given product to create with one correct response</li> <li>• traditional mc tests focused on acquisition of knowledge</li> </ul>
<ul style="list-style-type: none"> <li>• students working harder than the teacher during learning</li> </ul>	<ul style="list-style-type: none"> <li>• students passively listening to the teacher; the teacher is doing all the work</li> </ul>
<ul style="list-style-type: none"> <li>• involves pushing students out of their comfort zone without shutting them down; most likely meaning differentiated instruction</li> </ul>	<ul style="list-style-type: none"> <li>• one size fits all instruction</li> </ul>
<ul style="list-style-type: none"> <li>• scaffolding learning to support success; allowing failure and then the opportunity to learn from mistakes</li> </ul>	<ul style="list-style-type: none"> <li>• expecting students to do it on their own the right way the first time</li> </ul>
<ul style="list-style-type: none"> <li>• shows students how to deal with complexity and ambiguity</li> </ul>	<ul style="list-style-type: none"> <li>• making things more complicated and unclear</li> </ul>

## What does rigor look like in schools from the teacher and student perspective?

### What the teacher does to promote rigorous learning?

Designs/refines curriculum so:

- the development of conceptual understanding is the “end” and the content and skills are the “means to the end.”
- there is an exploration of authentic, real world issues/ concerns/ problems so students see the relevance of their learning
- transfer of learning to new situations is built into the design of the assessments for the unit
- the content presented is seen as complex, ambiguous, provocative or emotionally challenging
- students are engaged in reading complex text to develop understanding
- essential questions or inquiry is used as a lens exploring the conceptual understandings
- students are engaged in doing the work constructing understanding.
- students have the time to engage in think necessary to develop understanding without being told what to think.
- students have choice in what content, process or product they use to develop and demonstrate understanding
- technology is used to support thinking, product development and/or communicate understanding
- students are required to monitor their thinking as they move through the unit of study
- students value the diversity of perspectives, approaches and learning styles each brings to the table.
- dispositions, habits of mind and the affective traits of learning are explicitly taught and reflected upon. in particular the following dispositions contribute to rigor:
  - *openness to continuous learning* – fosters growth mindset
  - *taking responsible risks*
  - *persisting – learning from mistakes*
  - *questioning and posing problems*
  - *metacognition(3)*
  - *applying past learning to new situations)*
  - *creativity, innovation*

## What the teacher does to promote rigorous learning?

### Designs instruction that:

- **Facilitates** the meaning making processes which require them to reason and think at higher levels.
  - making generalizations or connections to prior knowledge
  - drawing conclusions from observations or multiple sources;
  - citing evidence and developing a logical arguments for concepts
  - explaining phenomena in terms of concepts
  - using concepts to solve non-routine problems
  - analyzing similarities and differences in issues and problems
  - proposing and evaluating solutions to problem
  - recognizing and explaining misconceptions
  - making connections across time and place to explain a concept or big idea
  - experimental designs with more than one dependent variableAND supporting thinking with evidence and explanations
- Scaffolds learning so students can achieve success. Independence, even at the secondary level, is not assumed the first time around. Students work towards independence over time.
- Requires students to comprehend complex text
- Differentiates instruction so it is personally challenging
- Pushes students out of their comfort zone without shutting them down
- Asks questions that do not necessarily require one right answer AND involve reasoning and higher level thinking. Expecting students to explain the solution when they share an answer using evidence and sharing their reasoning
- Ensures appropriate amounts of time are allotted to engage students in constructing understanding and promotes “wait time” during classroom discourse
- Continuously gathers evidence of student understanding to inform next steps in instruction
- Gives feedback that relates directly to the learning target for the day
- Creates opportunities to celebrate the hard work students have put forth to construct understanding

## What the students does in a classroom that supports rigorous learning?

### Engages in the learning by:

- Actively participating in the meaning making processes and monitoring own involvement
- DOING THE WORK of constructing understanding
- Using the language (vocabulary) of the discipline to communicate orally or in writing
- Use strategies to comprehend complex texts
- Asking questions of peers and teacher to related to further understanding
- Making choices about paths to take to or ways to communicate understanding
- Seeking out and using feedback to further understanding
- Learning from mistakes and sees learning as a continuous, building process
- Recognizing the relationship between hard work and progress and achievement
- Setting goals and monitors understanding as a unit unfolds
- Develop self-confidence by reflecting on what they have done to construct understanding

## What the teacher does to promote rigorous learning?

Designs/refines and uses **assessment** to:

- monitor student achievement focusing on achievement and progress
- uses formative assessment to collect evidence of students' progress toward goals and as a basis for feedback that will move learning forward
- provide specific, descriptive feedback to students about their learning during the learning process so refines to understanding can be made
- create opportunities for students monitor their understanding through self and peer assess feedback
- assess clearly articulated goals (based on standards and/or department or district goals)
- assess and evaluate students' ability to transfer their learning to new situations which may involve:
  - Developing a logical argument
  - analyze and synthesize information from multiple sources
  - relate ideas *within* the content area or *among* content areas
  - select one approach among many alternatives on how the situation should be solved
  - critiquing experimental designs
  - include designing and conducting experiments
  - plan and develop solutions to problems, ideally for an authentic situation.
- have students communicate knowledge and/or skills through written, artistic, oral, mathematical, or technological demonstrations and/or products that require high levels of thinking and different types of knowledge.
- generate evidence of students' thinking, analysis, synthesis, research, evaluation, creation, revision, reflection, and/or response to an essential question
- generate original and unique responses. There is no one "right" answer.
- clearly communicates expectations through checklists and rubrics clearly and models.

## What the students does in a classroom that supports rigorous learning?

With respect to the assessment process, students:

- set goals and monitor understanding as a unit unfolds
- participate in authentic performances of understanding that require effective communication using the language of the discipline
- seek out different perspectives and alternative solutions before drawing conclusions or solving a problem
- use revision as part of the learning process
- work to see how each learning opportunity connects to the larger whole
- use checklists and rubrics criteria (in checklist form or in rubric form) before and during the assessment process to inform their work

## What the teacher does to promote rigorous learning?

Creates an **environment** where:

- the students believe the teachers cares about them
- the students see value in the learning. They see its relevance, are actively engaged in constructing understanding independently and with peers and are appropriately supported.
- norms and routines are used to create a safe environment for active participation and learning from mistakes.
- planning for learning promotes student ownership. Students are engaged in discourse, expanding answers and asking questions to support their learning. The free exchange of ideas is encouraged.
- expectations for ALL students are high. Teachers believe students can be successful with the appropriate expectations and do not lower expectations over time in response to student behaviors.
- students see the relationship between hard work and learning. Feedback focuses on achievement, progress and the processes that enabled success.

## What the students does in a classroom that supports rigorous learning?

Supports/upholds the environment by:

- respecting and using the norms and routines to guide interactions with others; reflecting on them to troubleshoot or determine their value
- realizing understanding is hard won; it takes work and perseverance
- actively participating in responding to questions and inviting peers into the conversation
- applying the habits of mind and reflecting on how they support their thinking, progress and achievement
- holding their peers to high expectations and supporting each other in moving to understanding
- valuing the diverse perspectives, approaches and learning styles their peers bring to the table



## How could this document be used to support rigorous learning in your classroom?

1. Create your definition of rigor and check it against the list of what rigor is and what it is not.
2. Review the lists of what the **teachers** do related to creating a classroom environment, curriculum, instruction and assessment that supports rigor. Identify which attributes you regularly incorporate and those which you do not. Select the one you think would be most likely to make a difference with respect to rigor in your classroom and:
  - Explore the provided resources to help you learn more about the intervention
  - Talk to a peer on Curriculum Council or other to discuss it
  - Talk to an instructional coach or administrator about what it looks like

Refine your practice, monitor the impact and reflect on how it supported or did not support rigor.

Note: You may want to choose one of the categories for the self-assessment rather than all four.

3. Review the lists of what **students** do related to creating a classroom environment, curriculum, instruction and assessment that supports rigor. Identify which attributes you regularly incorporate and those which you do not. Select the one you think would be most likely to make a difference with respect to rigor in your classroom and:
  - Explore the provided resources to help you learn more about the intervention
  - Talk to a peer on Curriculum Council or other to discuss it
  - Talk to an instructional coach or administrator about what it looks like

Refine your practice, monitor the impact and reflect on how it supported or did not support rigor.

Note: You may want to choose one of the categories for the self-assessment rather than all four.

4. Use the resources in “What the experts say about rigor?” to self-assess your practice as follows:

Resource #2: Checklist for Assessments by Learner-Centered Initiatives – Use this to assess/reflect on your performance tasks

Resource #3: Rigor Rubric based on Strong, Silver and Perini – Use this to assess/reflect on your unit design.

Resource #4 – Rigor, Relevance Framework by the International Center for Leadership in Education - Use this to assess/reflect on your instruction practice.

## Resources

### Book Chapters:

- What the experts have to say about rigor? Definitions of rigor Brighton Curriculum Council used to create this document.

Chapter 1: Rigor from Strong, Silver and Perini. (2001) *Teaching What Matters Most: Standards and Strategies for Raising Student Achievement*.

### Articles:

- Wagner, T. (2008b). *Rigor Redefined*. Educational Leadership, 66(2), 20-24.
- Blackburn, B. & Williamson, R. *4 Myths About Rigor in the Classroom*. Larchmont, NY: Eye on Education

### Books:

- Blackburn, B. (2008b). *Rigor is Not a Four-Letter Word*. Larchmont, NY: Eye on Education. Alexandria, VA: ASCD.
- Jackson, R. (2009). *Never work harder than your students and other principles of great teaching*. Alexandria, VA: ASCD.
- Jackson, R. *How to plan rigorous instruction*. Alexandria, VA: ASCD.
- Strong, Silver and Perini. (2001) *Teaching What Matters Most: Standards and Strategies for Raising Student Achievement*: Alexandria, VA: ASCD.

### Websites:

- Barbara Blackburn's work on rigor: [www.barbarablackburnonline.com](http://www.barbarablackburnonline.com)
- Karin Hess's work on rigor: [www.Karin-Hess.com](http://www.Karin-Hess.com)
- Robyn Jackson's work on rigor: <http://www.mindstepsinc.com>

### Free Webinars:

- Barbara Blackburn's rigor in the classroom: [https://www.youtube.com/watch?v=KLNag\\_XgKqM&feature=youtu.be](https://www.youtube.com/watch?v=KLNag_XgKqM&feature=youtu.be)

### Video Examples of Rigorous Instruction:

- 1<sup>st</sup> grade science sharpening observations skills - <http://eeducation.org/resources/austins-butterfly>
- 2<sup>nd</sup> grade ELA/science - <http://eeducation.org/resources/inspiring-excellence-part-3-building-motivation-and-skills-through-independent-research>
- 5<sup>th</sup> grade STEM class designing roller coasters - [www.teachingchannel.org/videos/teaching-stem-strategies](http://www.teachingchannel.org/videos/teaching-stem-strategies)
- 10<sup>th</sup> grade ELA speed dating protocol for feedback - <http://eeducation.org/resources/using-a-speed-dating-protocol-to-think-critically-about-writing>
- 10<sup>th</sup> grade humanities creating their own DBQ - <https://vimeo.com/147745075>
- 12<sup>th</sup> grade humanities – <https://vimeo.com/147860127>