

Professional Development Sessions on Instructional Rigor

*(30-45 minute sessions to be delivered
to teachers or leaders)*



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Mini-Professional Development Sessions

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Professional Development One: Understanding Rigor

1. Assess teachers' current understanding. Ask teachers to answer the following three questions anonymously. Either have them answer them in advance and collate them, (which you can hand out for discussion) or use post-it notes.
 - a. What is rigor?
 - b. What are students doing in a rigorous classroom?
 - c. What are teachers doing in a rigorous classroom?
2. After a discussion of teachers' perceptions of rigor, hand out The Beginner's Guide to Rigor. After they read it, allow them to discuss the content. Lead a discussion, adding information from this workshop.
3. Next, begin to share activities. Choose one to three activities at the beginning. Do the activities with teachers, then allow them to discuss why the activities are rigorous. Ask them to choose one activity to use in their classroom during a specified time period.

Professional Development Two: Myths of Rigor

1. Revisit the definition of rigor. Discuss any questions.
2. Ask teachers to share their classroom examples. What did they do? What worked? What were challenges? Discuss.
3. Ask teachers to read *Seven Myths of Rigor*. What is their response? Do they see how the myths are untrue? What are their concerns? Discuss.
4. Next, share activities. Choose one to three activities. Do the activities with teachers, then allow them to discuss why the activities are rigorous. Ask

them to choose one activity to use in their classroom during a specified time period.

Sources for Additional Activities

Three Strategies to Increase Rigor in the Classroom (attached).

3 Simple Strategies for More Rigorous Instruction (attached).

Barbara's books, *Rigor is NOT a Four-Letter Word*, *Rigor and Differentiation in the Classroom*, *Rigor in the RTI/MTSS Classroom*, *Rigor Made Easy*, and *Rigor in Your Classroom: A Toolkit for Teachers*.





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The Beginner's Guide to Understanding Rigor

Barbara R. Blackburn



Rigor is creating an environment in which each student is expected to learn at high levels, each student is supported so he or she can learn at high levels, and each student demonstrates learning at high levels (Blackburn, 2008).

When I am in schools working with teachers, I'm often asked why I care about rigor. They are also quick to tell me they care about rigor because they are told they have to. My response is simple. There are other reasons, such as the clear research base that shows our students need more rigor, new standards that require more rigor, or the number of students who graduate from school ill-prepared for college or the workforce.

But my most important reason is this: rigor is not about giving students more to do, or punishing them with more homework. Rigor is about helping students learn at higher levels, and that's why I became a teacher.

Defining Rigor

My definition of rigor has a sharp focus on instruction: creating an environment in which:

each student is expected to learn at high levels,

each student is supported so he or she can learn at high levels, and

each student demonstrates learning at high levels.

Notice we are looking at the environment you create. The tri-fold approach to rigor is not limited to the curriculum students are expected to learn. It is more than a

specific lesson or instructional strategy. It is deeper than what a student says or does in response to a lesson. True rigor is the result of weaving together all elements of schooling to raise students to higher levels of learning. Let's take a deeper look at the three aspects of the definition.

Expecting Students to Learn at High Levels

Rigor is creating an environment in which each student is expected to learn at high levels. Having high expectations starts with the decision that every student possesses the potential to be his or her best, no matter what.

As you design lessons that incorporate more rigorous opportunities for learning, you will want to consider the questions that are embedded in the instruction. Higher-level questioning is an integral part of a rigorous classroom. Look for open-ended questions, ones that are at the higher levels of Bloom's Taxonomy and Webb's Depth of Knowledge.

It is also important to look at how teachers respond to student questions. When I visit schools, it is not uncommon to see teachers who ask higher-level questions. But I then see some of the same teachers accept low-level responses from students. In rigorous classrooms teachers push students to respond at high levels. They ask extending questions. If a student does not know the answer, the teacher continues to probe and guide the student to an appropriate answer, rather than moving on to the next student.



Supporting Students to Learn at High Levels

High expectations are important, but the most rigorous schools assure that each student is supported so he or she can learn at high levels, which is the second part of our definition. It is essential that teachers design lessons that move students to more challenging work while simultaneously providing ongoing scaffolding to support students' learning as they move to those higher levels.

Providing additional scaffolding throughout lessons is one of the most important ways to support students. This can occur in a variety of ways, but it

requires that teachers ask themselves during every step of their lesson, “What extra support might my students need?”

Ensuring Students Demonstrate Learning at High Levels

The third component of a rigorous classroom provides each student with opportunities to demonstrate learning at high levels. What I’ve learned is that if we want students to show us they understand what they learned at a high level, we also need to provide opportunities for students to demonstrate they have truly mastered that learning. One way to accomplish that is through increased student engagement.

Options include requiring all students to respond either through pair-share, thumbs up or down, writing an answer on small whiteboards and sharing their response, or responding on a handheld computer that tallies responses. Such activities hold each student accountable for demonstrating their understanding.

Students should also demonstrate learning at a **high** level. As I mentioned earlier, using tools such as Bloom’s Taxonomy or Webb’s Depth of Knowledge (webbalign.org) can help you ensure that students are working at higher levels of critical thinking.



Conclusion

Rigor is much more than assigning more work for students to complete. True rigor involves increasing expectations for students, providing support and scaffolding so they can be successful, and giving them opportunities to demonstrate their understanding at higher levels of thinking.

Source: <http://www.barbarablackburnonline.com/rigor/>

Seven Myths of Instructional Rigor

Instructional rigor is one of the most discussed topics in education today. But there is much debate over what rigor is and is not. Let's look at seven myths, then a concrete definition of the actual meaning.

Myth One: Lots of homework is a sign of rigor.

For many people the best indicator of rigor is the amount of homework required of students. Some teachers pride themselves on the amount of homework expected of their students, and there are parents who judge teachers by homework quantity. Realistically, all homework is not equally useful. Some of it is just busywork, assigned by teachers because principals or parents expect it. For some students, doing more homework in terms of quantity leads to burnout. When that occurs, students are less likely to complete homework, and may be discouraged about any learning activity.



Myth Two: Rigor means doing more.

“Doing more” often means doing more low-level activities, frequently repetitions of things already learned. Such narrow and rigid approaches to learning do not define a rigorous classroom. Students learn in many different ways. Just as instruction must vary to meet the individual needs of students, so must homework. Rigorous and challenging learning experiences will vary with the student. Their design will vary; as will their duration. Ultimately, it is the quality of the assignment that makes a difference in terms of rigor.

Myth Three: Rigor is not for everyone.

Some teachers think the only way to assure success for everyone is to lower standards and lessen rigor. This may mask a hidden belief that some students can't

really learn at high levels. You may have heard of the Pygmalion Effect--students live up to or down to our expectations of them. Each student can complete rigorous work at high levels, whether they are advanced or a student with special needs. Does the end result look different for those two students? Yes, but I know from my own experience as a teacher of struggling students reading far below their grade level that any teacher can be rigorous, and any student can reach higher levels with the right support.

Myth Four: Providing support means lessening rigor.



In America, we believe in rugged individualism. We are to pull ourselves up by our bootstraps and do things on our own. Working in teams or accepting help is often seen as a sign of weakness. Supporting students so that they can learn at high levels is central to the definition of rigor. As teachers design lessons moving students toward more challenging work they must provide scaffolding to support them as they learn.

Myth Five: Resources equal rigor.

Recently, I've heard a common refrain. "If we buy this program, or textbook, or technology, then we would be rigorous." The right resources can certainly help increase the rigor in your classroom. However, raising the level of rigor for your students is not dependent on the resources you have. Think about the resources you have now. How can you use them more effectively? Do you use a textbook that includes true-false tests? Often, they are not rigorous because students can guess the answer. However, add one step for more rigor. Ask students to rewrite all false answers into true statements, and it requires students to demonstrate true understanding. It's not the resources; it's how you use them that make a difference.

Myth Six: Standards alone take care of rigor.

Standards alone, even if they are rigorous, do not guarantee rigor in the classroom. The Common Core State Standards are designed to increase the level of rigor in

classrooms across the nation. However, if implemented without high levels of questioning or applications, the standards themselves are weakened. Your instructional practices, or how you implement standards, are just as critical as the curriculum.

Myth Seven: Rigor is just one more thing to do.

Rigor is not another thing to add to your plate. Instead, rigor is increasing the level of expectation of what you are already doing. For example, if you are teaching vocabulary, instead of asking students to write their own definition of the word, ask them to write a riddle. It's the same end result, but at higher levels of Bloom's Taxonomy.



A Final Note

Despite its reputation, the word rigor does not have to be a negative in your classroom. True instructional rigor is "creating an environment in which each student is expected to learn at high levels, each student is supported so he or she can learn at high levels, and each student demonstrates learning at high levels (Williamson and Blackburn, 2011)."

References

- Blackburn, B. (2014). *Rigor in Your Classroom: A Toolkit for Teachers*. New York, NY: Routledge.
- Blackburn, B. (2014). *Rigor is NOT a Four-Letter Word*. New York, NY: Routledge.
- Bloom B. S. (1956). *Taxonomy of Educational Objectives, Handbook I: The Cognitive Domain*. New York: David McKay Co Inc.
- Williamson, R. & Blackburn, B. (2011). *Rigor in Your School: A Toolkit for Leaders*. New York, NY: Routledge.

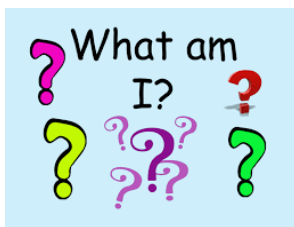
Source: <http://www.teachthought.com/pedagogy/7-myths-about-rigor-in-the-classroom/>

Rigor Made Easy:

Three Strategies to Increase Rigor in the Classroom

Increasing Rigor Through Riddles

First, let's look at a way to increase the rigor of vocabulary. Usually, we ask students to demonstrate their understanding of a word or concept by restating the definition in their own words, or by using it in a sentence. Oftentimes, students simply memorize the definition long enough to complete the activity and take a test, rather than truly understanding the word or concept.



To increase the rigor, ask students to write a riddle about the word or concept. In addition to knowing what something means, they must turn that information into clues so that other students can guess the answer.

Prices go up.
Your wallet is thinner.
You pay twice as much
To provide family dinner.

Answer: Inflation

Increasing Rigor Through Problem-Solving

Next, when we start a lesson, we typically tell students what we will learn about that day. We are assuming they do not know anything yet, so we do all the talking. That's not very rigorous. We can turn that around and make all our introductions more about problem-solving and discovery in a simple way. *Three Alike* is a game in which the teacher provides three examples to the students, and then asks the group to guess what he or she will be teaching about today. Rather than saying, "I'm going to be teaching about negative integers today.", the teacher

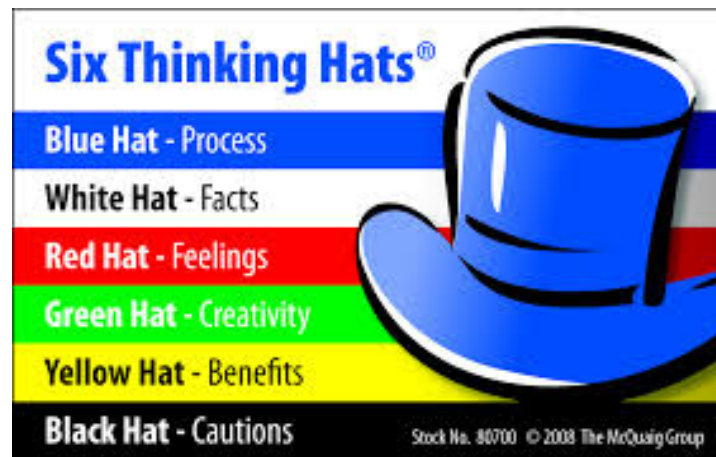
says, “Notice I have three numbers on the screen (-5, -14, -25). What do they have in common?” At least one student in the room probably knows the answer, then you can build off that information as the lesson continues.

Once students are adept at *Three Alike*, you can increase the rigor again by playing the *Red Herring Game*. In this game, you provide four examples. Students must identify the one that does not belong, and justify their answer. For example, “Which of these does not belong: New South Wales, Tasmania, Sydney, or Victoria?” The answer is Sydney, because it is not a state. This can introduce your discussion of states and cities.

Once students are familiar with both games, you can shift the ownership to them. They come up with the examples, and their classmates must guess the answers.

Increasing Rigor Through Various Points of View

Finally, it’s important to look at a situation through a variety of perspectives. When I was a teacher, I used six-sided cubes to encourage thinking about an issue. Each side of the cube had a prompt, such as “apply it”, “analyze it”, etc. It was effective, but not for every assignment. It also didn’t encourage group problem-solving. Another alternative is the use of Thinking Hats. With this activity, students are placed in groups of six, and each one is assigned a role, or hat. Notice from the descriptions below the perspective or assignment for each student.



Thinking Hats

- The White Hat calls for information known or needed. “The facts, just the facts.”
- The Yellow Hat symbolizes brightness and optimism. Under this hat you explore the positives and probe for value and benefit.
- The Black Hat is judgment—the devil’s advocate or why something may not work. Spot the difficulties and dangers—where things might go wrong. (I tend to change this to purple rather than black) Probably the most powerful and useful of the hats but a problem if overused.
- The Red Hat signifies feelings, hunches and intuition. When using this hat you can express emotions and feelings and share fears, likes, dislikes, loves, and hates.
- The Green Hat focuses on creativity—the possibilities, alternatives, and new ideas. It’s an opportunity to express new concepts and new perceptions.
- The Blue Hat is used to manage the thinking process. It’s the control mechanism that ensures the Six Thinking Hats® guidelines are observed.

Source: www.debonogroup.com/6hats.htm

Imagine using this when analyzing an issue in a science class, such as whether deniers (or supporters) of climate change should be able to use social media to promote their agenda. The white hat student points out the facts of the issue, such as the first amendment. The yellow hat looks for the positive aspects in the issues, or the benefits. Black, or purple plays the devil's advocate. What are the difficulties? Where might something go wrong with this issue? How might the use of social media promote their agenda and damage Australia? The red hat focuses on emotions, both positive and negative. What emotions drive the argument over this issue? Green looks at the creative nature of the issue, with possibilities, solutions, and new ideas. Finally, the blue hat is the manager of the process, ensuring that all perspectives are addressed.

Imagine how much more depth of discussion and analysis takes place when looking at the issue from all perspectives. You have raised the rigor of the assignment and engaged students at a higher level.

Conclusion

Raising the level of rigor in your classroom does not have to be difficult or a separate lesson. Rather, using creative and engaging instructional strategies that push students to higher levels of thinking can occur as a regular part of your instruction.

Source: <http://www.middleweb.com/27750/rigor-made-easy-3-ways-to-go-deeper/>



3 Simple Strategies for More Rigorous Instruction

Let's look at options to increase the depth of your instruction. What you'll notice throughout the activities is a shift to student ownership of learning, as well as the need to think at higher levels to complete the activities.

Real-Life Learning

We often talk about the importance of real-life learning in the classroom. However, many times we have students complete application activities at the end of a lesson. In a rigorous classroom, we can flip this to apply the inductive model. Jessica Guidry, one of my former students, designed an ecology unit for her science classroom that applies this principle. Her students were introduced to the unit with the following task:

You are an ecologist from Rock Hill, South Carolina. Recently, members of the United Nations have come together and decided that they must eliminate one biome to make room for the world's growing human population. You



and a group of your peers have decided to take a stand. You will each choose one biome to present to the United Nations in New York City this April. It is very important that you persuade the members of the UN to keep your chosen biome alive! The UN has asked that you write a persuasive essay to present to the audience. They also asked that you bring visuals and information about your references. You must be sure that you include how your biome benefits the world population. You need to include information about the habitats, populations, animals, plants, and food chains of your biome.

Throughout the unit, she integrated a variety of other open-ended projects, such as creating a flip book promoting their biome, participating in a debate, and creating food chains/webs in addition to the regular mix of lecture, guided discussion, and laboratory activities. However, since she began with the open-ended, authentic situation, her students were more engaged and challenged throughout the lessons.

Video Reporting

One of my son's favorite activities is recording his friends skateboarding and editing the clips. He used these techniques in his maths class to analyze the maths skills used in skateboarding. Given a choice of assignments, he would rather create a video than write a paper.



Students can create a video report on a wide range of topics in almost any class. Simply start with a topic, ask students to choose a perspective, and start filming. I've seen this used for students to create character profiles, job descriptions, and mini-talk shows. It's an engaging, motivating activity. However, as with all activities, provide

structure and guidelines to ensure students move beyond a basic assignment to one that requires higher levels of thinking.

Sample Video Reporting Activities

Interview with a Historical Figure
News Report of a Current or Past Event
Profile of Math Applications of a Sport
Demonstration of the Water Cycle
Model Job Interview

Virtual Tours



Another effective way to use technology in the classroom is to conduct virtual field trips. In today's budget-conscious schools, this is particularly helpful. Imagine the activities you can integrate into the classroom with a virtual tour of the Smithsonian. However, it's important to remember that the field trip itself should not be the end result. Any tour should be linked to your standards, and the activities should result in increased learning related to your objectives. In the sample below, a visit to the Louvre was linked to a study of Egyptian history. With adaptations of the assignments, it could easily be used in a high school art class.

The Louvre Visit

Today we are going to take an exciting trip to Paris, France! Your ticket is <http://www.louvre.fr/en> and your vehicle is your computer, tablet or phone. Please read the instructions carefully so your trip is not wasted. I want you to have fun and learn something new in the process. We will have a round-table discussion on our magnificent trip Friday. Have fun and I can't wait to hear about your adventure!

1. As your tour guide, I suggest you learn some information about the Louvre Museum because you begin your tour. Start at the *Collection and Louvre Palace* link. Read the information about the history of The Louvre. You are in

Paris and you call home to talk to someone your love. Tell them about the Louvre's history in 3-5 sentences. Include why the museum was established and how it has been important to France.

2. Now you are ready to take your tour. Using the same link go to *Online Tours*. Choose following tour: ***Egyptian Antiquities***, *Walk around on the floor to several areas. Spend 10 minutes learning how to navigate through the museum floor. Go to the help menu for ways to better navigate the tour.*
3. Choose one sculpture from your tour. Analyze how it reflects the culture of Egypt.
4. Interpret the artwork. Communicate the artist's statement. Describe what you think the artist is trying to say through the work of art. Expound on the feeling conveyed by the artwork. Describe what the artwork means to you, and why. Explain what you feel is the artist's intended purpose for creating that particular work of art. Examine why the artist made the choices in technique, materials and subject matter and how they relate to the intended purpose. Your narrative should be approximately one page.

****Note**—for more suggestions, visit <http://www.wikihow.com/Critique-Artwork> (the suggestions in number 4 are an excerpt from this site).

NOTE: Ideas for other content areas:

Maths: Students can plan the trip to the Louvre, look up the flight, and calculate the cost. Social Studies: Plan what to take and how to pack, discuss how to prepare to visit the country, learn about Paris, and the French government. Also discuss the history of Egypt and the symbolism of the historical time period. Language Arts: How did the authors and poets of Egypt impact the culture? Also teach about critiques and writing the analysis.

A Final Note

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Each of these shows how rigor can be a part of your instruction. You don't need to throw out everything you are doing; rather, take what you are doing and step it up a notch.

Source <https://www.teachthought.com/pedagogy/3-simple-strategies-rigorous-instruction/>