Some Practical Steps You Could Take Every Day

Based on the book by Barbara R. Blackburn, "Rigor is NOT a Four-Letter Word", Routledge, 2018

Rigour 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 (p13).

Increase Rigour Through Questioning

Deepen students thinking through requiring evidence.

- 1. QUESTIONING: One of the most powerful changes to questioning is to add a simple follow-up question, "What makes you say that?" (Making Thinking Visible, Ritchhart et al)
- 2. QUESTIONING: Requiring students to provide evidence for opinions and responses is a necessary skill that should start in Kindergarten. It's simple: Just ask "Why?" If your students answer that Clifford is a big dog, ask them "why do you think he's big?". When asking students to justify an antagonist's particular actions, ask, "Why?" Of course, with older students we should words such as "evidence" and "justification", but at the heart of citing evidence is answering, "Why?" (p4)

Understanding is similar to climbing a mountain. You may have to start at the bottom, but to get the full view (the rigorous view) you have to make it to the top. You climb to the top one step at a time; the steps become increasingly more difficult as you go, but the view is worth it (p16).

- 3. QUESTIONING: In their book, Asking Better Questions, Norah Morgan and Juliana Saxton classify questions by function. They propose three types of questions: Within each classification, there are specific types of questions (pp17 & 18):
 - a. Questions that elicit understanding which draw out known information;
 - b. Questions that shape understanding- which ask for thoughts and feelings; and
 - c. Questions that press for reflection which require critical and creative thought.

MORGAN AND SAXTON CLASSIFICATIONS				
Classification	Types of Questions (Questions that)			
Questions that elicit information	Establish the rules of the game			
	Establish procedure			
	Establish or help control group discipline			
	Unify the class			
	Focus on the recall of facts			
	Supply information and may suggest implications			
Questions that shape	Reveal experience			
understanding	Focus on making connections			

	Press students to rethink or restate by being more accurate and more specific			
	 Help promote expression of attitudes, biases and points of view 			
	Demand inference and interpretation			
	Focus on meanings beyond textual content			
Questions that press for reflection	Develop suppositions of hypotheses			
	Focus on personal feelings			
	Focus on future action or projection			
	Develop critical assessment or value judgements			
Sample questions				
Questions that elicit information	How did Hitler justify his annexation of Sudetenland in 1938?			
Questions that shape understanding	When might you be justified in taking over another country?			
Questions that press for reflection	If you were an arms manufacturer, how would you feel about the possibility of war?			

Increasing the Level of Depth and Complexity

It is critical that we craft lessons that move students to more challenging work while simultaneously providing ongoing scaffolding as they learn (p23)

- 4. READING: I worked with a school district that encouraged summer reading. Students read one book over the summer and then gave a brief summary of the book during the first week of school. As you might imagine, the quality of the presentations varied tremendously. Some students were creative and provided a great deal of detail about their books, whilst others stated surface information that was available from the internet.
 - As an alternative, one teacher required her students to create book webs. In addition, each student drew a web connecting their book to their classmates' books. It was their responsibility to talk to each other and discover ways the books were related. In addition to shifting the responsibility for learning to the students, the structure of the assignment forced students to move beyond the basic, summary information to look for deeper connections among the various books (p38).
- 5. READING: One way to increase the depth & complexity of a reading assignment/ task is to pair texts. A common activity in classrooms is to read a fictional story or novel. To increase the rigour of that activity, add a follow-up activity, comparing the fictional text to non-fictional information. For example, after reading the classic novel, Sea Wolf, by Jack London, students can read about schooners and the sealing industry. Instead of simply reading and discussing the story, students are required to use research skills, cite sources, and compare and contrast information from a variety of sources. The new activity requires all students to think at higher levels. (p42)
- 6. WRITING: Perhaps you would like your students to write a paragraph about the topic you've been teaching in class, such as the solar system. That is a standard, low-level assignment that asks them to restate or summarise the information covered. Even if you ask students to elaborate in greater detail, it's likely that the responses are fairly basic. Instead let's ratchet up the rigour using

the RAFT strategy. RAFT stands for Role/Audience/Format/Topic. Using this strategy, students would assume a role (such as an astronaut in this case) and write from the perspective to a more authentic audience, such as people reading his/her online blog. With a slight shift in the assignment details, students are required to understand the topic at a higher level in order to complete the task. Additionally, when students are asked to write for a genuine purpose and audience, they tend to complete the assignment more effectively. Younger students could draw rather that write their RAFTs. Also, choose roles and formats that interest your students (pp55 & 56).

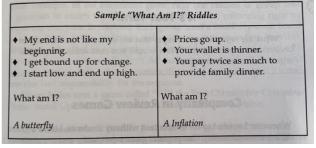
Examples of RAFT: Rigour in Writing				
Role	Audience	Format	Topic	
Water drop	New water drops	Travel guide	Water cycle	
Comma	Young authors	Op Ed piece	Misuses of the comma	
David Attenborough	Zoo visitors	Lifestyle	Impact of habitat loss	
		program	on Australian animals	

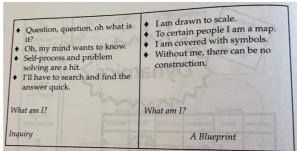
7. VOCABULARY: How many of our students struggle with understanding new vocabulary terms? My students did, particularly in science. It's difficult to understand the specialised vocabulary found in some content areas. When I was a student, the model for teaching vocabulary was simple. The teacher gave the class a list of words. We copied the words, used a dictionary to find the meaning,

and then wrote a sentence for each of them. This model provides a routine for students, but rarely leads to a deep comprehension of the meanings of concepts. One of my students just rearranged the words from a dictionary definition and said it was her own!

I learned to create opportunities for students to demonstrate their understanding in ways that required them to synthesise information about a term and refine it down to key points. Using a graphic organiser, students can discuss the different elements of a particular vocabulary term (see the example dynamics in music (p61).

- Definition:
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- 8. VOCABULARY: As a culminating activity, rather than writing a definition in their own words, ask students to write a "What Am I?" riddle. (p61)
- 9. VOCABULARY: When I was at Loris High School, teachers adapted this idea. Their students created "Who Am I?" and "What Am I?" raps to review content. (p62)





10. VOCABULARY: You can use poetry as an open-ended way for students to demonstrate students' understanding of vocabulary. For example, at the end of a lesson, place your students in small groups to create poems about the vocabulary words. I recommend haiku, the Japanese patterned three-lined poem. Line one must include five syllables, line two seven, and line three five. It provides an interesting challenge to students to condense the information and present it in the following pattern.

Atmosphere, it's here Around the Earth in layers N,O,H and more Poems have purpose Express ideas and feelings Creativity

- 11. HISTORY: Creating timelines of an event or a period in history eg the first European settlement of Australia. Note that although the project starts off at a basic level, it quickly moves into more rigorous work. First students individually create timelines using information from their text and online sources. They put the 10 most important events on their timeline and defend their choices. After all students have finished, the class compares their timeline, debates the choices, and comes to a consensus of the 10 most important overall events.
- To add even more rigor have the students choose one of their individual events that did not make the final timeline. Using that event, write how life would have changed if that event had never happened, preparing evidence to support the perspective. Prepare a blog with the information.

Increase the Level of Expectation

Rigour is not another thing to add to your plate. Instead, rigor is increasing the level of expectation of what you are doing.

12. SETTING EXPECTATIONS: When you are setting the task, crafting the question is particularly important. You want to be sure the complexity of the learning outcome is reflected in a clear, focused manner. It's also important to provide explicit instructions as to your expectations. As with any questions you can write items at a lower or higher level. In our case we want to strive for rigorous questions as much as possible. Here is a question we revised to a more rigorous version.

Standard Question: What is the theme of "Goldilocks and the Three Bears"? Make sure you use details from the text to support your choice.

Rigorous Question: What is the theme of "Goldilocks and the Three Bears"? Make sure you use details from the text to support your choice. "Goldilocks and the Three Bears: was written nearly 200 years ago. Justify whether the theme applies today. Provide an example from modern life to validate your answer.

Notice that although the first question does require some higher order thinking, the second one is at a more advanced level. It's very specific so that students know exactly what to do to demonstrate their understanding. (p138).