

# RISE to the CHALLENGE

Designing Rigorous Learning That  
Maximizes Student Success

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# Introduction: Using Challenge to Maximize Academic Excellence

We as educators are asked to excel with all our students each and every day, despite the many obstacles placed in our way. So what must occur for us all to succeed?

*Challenge.* Perhaps nothing is more critical to the success of students, teachers, and schools. A bold claim, but the pages that follow provide substantiating evidence alongside insights on how to maximize challenge, and thus success, for all the students in your classroom.

I recently realized that I, along with a great many other educators, have been asking the wrong question of teachers: “Do you provide a challenging and rigorous learning environment for students?” The unequivocal answer is always “Yes!”—but then, no rational teachers would admit to *not* providing a challenging learning environment, even if it were true. Questions with truisms for answers—“Do all teachers desire to be effective in the classroom?” “Can all students learn?” “Should learning promote critical thinking and 21st century skills?”—tend to affirm the status quo. So I began restating the question as follows: “What evidence do you have that challenge and rigor are consistently present in your classroom?” Or

to make it even more tangible, “Where were challenge and rigor most visible in today’s lesson?” I find that teachers consistently and confidently proclaim that challenge and rigor are central to their teaching and learning, yet frequently go silent when asked to offer tangible supporting evidence.

Moving from blanket proclamations of challenging instruction to an evidence-packed understanding of what challenge looks like, feels like, and sounds like in the classroom is the shift at the heart of this book. Once we know what we are looking for, we can chart a course to modify our teaching so that challenge, rigor, and excellence are consistently present in our classrooms. Asking for evidence to support claims of challenging instruction generates a conversation that is more honest and more closely aligned to day-to-day practice than simply asking a yes-or-no question.

Given limited time and energy, it is essential that we prioritize our professional growth to effectively guide student learning. I realize that many are coming to this conversation tired and skeptical, suffering from initiative fatigue. It feels as though we try every new (and old) thing, only to quickly move on to the latest idea, not knowing if what we were doing before would yield results given sufficient time to work. Without careful examination and appropriate implementation, many initiatives are doomed from the start.

So how do we move from our current status quo to a pursuit of excellence that allows all students to succeed? First, we must realize that there is no magic bullet; we won’t wake up tomorrow and find all our challenges replaced by a happily-ever-after experience. Highly effective instructional practice takes time, intentionality, and effort. We must move away from trying to do it all, which results

that just because a lesson is published in a textbook or on the internet it is clear, logically sequenced, and properly aligned to relevant objectives. When I conduct a Google search for energy lesson plans, a common topic in science, how many of the 137,000,000 resulting hits meet my needs? I have seen compare-and-contrast lessons consisting of a PowerPoint slide highlighting differences and similarities between various forms of energy—a lower-order activity that does not meet the higher-order target intended in a compare-and-contrast lesson. Instead, students should be asked to explore, test, demonstrate, and discover that energy largely fits within two major categories: kinetic and potential. Once they realize this, they can begin to relate other forms of energy, such as mechanical, chemical, or sound, to these broader categories.

In addition to being coherent, lessons should connect learning to students' lives and to the big ideas. Otherwise students are just learning isolated facts. Knowledge retention is much more difficult when students can't tie that knowledge to real-life experiences. Using well-crafted essential questions is a great way to start integrating lessons into the bigger picture.

## **TIP 2: Strategies, Resources, and Technologies That Enhance Learning**

When we are strategic in our instruction, we focus on strategies, resources, and technologies that deeply and meaningfully engage the learner. To increase student-centered learning, we should ask such questions as the following: “To what extent are students provided with concrete experiences before abstract ideas?” “To what degree are students active in the learning process?” “To what extent do students go beyond just mimicking or verifying what the teacher

has shown?” Strategies may include scaffolding learning experiences that start with exploration of concepts, ideas, and questions before any formal explanation is given or modeled so that the learning is increasingly inquiry-based.

Modern technological advances have led many boards of education, administrators, and teachers to believe that technology will close the achievement gap, increase learning for all, and basically solve all education challenges. Unfortunately, computers are too often used as little more than glorified overhead projectors or word processors. When used strategically, technologies are transformative and purposeful. Common technologies such as Google Classroom can be either ordinary or transformative, depending on implementation. When students use technology collaboratively, through peer editing or by sharing documents, the final product is often superior and has greater potential to significantly increase learning.

### **TIP 3: A Safe, Respectful, Well-Organized Learning Environment**

There is a big difference between efficiency and effectiveness. As teachers, we want learning to be *effective*. As far as procedures and general management, we strive for a fluid, predictable, and *efficient* classroom that creates a respectful, collaborative environment. A well-managed classroom does not improve learning by itself. Rather, it sets the stage for success. Using instructional time wisely, paying attention to pacing and transitions, and establishing and following successful routines are the first steps in achieving a well-managed classroom. If consistently followed, positive habits established early on will save enormous time and energy as the school year progresses.

Effective teachers cultivate a respectful and collaborative learning environment. This includes being proactive with behavior management; maintaining a patient, encouraging, and listening environment; and being supportive, respectful, and approachable to students. Learning and collaboration are stifled when students fear how others will respond if they make a mistake or interpret something differently from others. Many will choose not to engage at all or will play it safe, providing lower-quality responses. It is up to the teacher to lead, model, and provide an unquestionably safe place where all can take risks and learn.

If the first three TIPS focus on pedagogical knowledge—the practices and art of teaching—the last four focus on pedagogical content knowledge (PCK): successfully engaging students with specific content. We have all heard of teachers who, though clearly brilliant, were ineffective in making content accessible to all learners. Great teachers can take the challenging and make it attainable for all. To paraphrase the late, great physicist Richard Feynman, if you can't explain something in simple terms, you don't understand it.

#### **TIP 4: Challenging, Rigorous Learning Experiences**

The practice of identifying, promoting, and refining the challenge, rigor, and excellence of classroom instruction on a daily basis is the focus of this book. This practice is where the greatest variance in performance of highly effective teachers can be explained. Although most teachers will say they provide their students with challenging and rigorous learning experiences, few are able to convincingly identify the challenge and rigor present in their lessons.

This book seeks to help teachers develop challenging, rigorous, and excellent learning experiences for students.

### **TIP 5: Interactive, Thoughtful Learning**

Highly effective classrooms seek to balance the *intrapersonal* and the *interpersonal*. If the instructional focus is overly intrapersonal, students may have trouble understanding perspectives outside their own and fail to appreciate the synergistic effects of collaboration; if it's overly interpersonal, students may have trouble developing self-sufficiency and learning to problem-solve on their own.

When we give students a test or challenge their understanding, we want them to be thoughtful and to exercise metacognition as they develop their knowledge. To this end, it is vital that we provide students with a richly engaging culture. Questions should stimulate thinking and participation with others, and interactions should be conversational and motivating. It is our responsibility as teachers to ensure that the purpose and relevance of learning experiences are clear to students.

### **TIP 6: A Creative, Problem-Solving Culture**

Both creativity and problem solving are vital for success in today's world, where we must work with the millions of vast data sets available to us online. To equip students for this reality, we need to foster a creative and inquisitive learning environment where students tackle open-ended problems and consider multiple perspectives. With new information constantly coming to light in our interconnected age, students must learn how to go about understanding the

intent and purpose of what they encounter and whether to modify prior conceptions.

### **TIP 7: Monitoring, Assessment, and Feedback That Guide and Inform Instruction and Learning**

The research on formative assessment is clear: checking in multiple times with *all* students in every class has a positive effect on achievement. Where there is proper formative assessment, the results of summative assessment shouldn't come as any surprise and should reflect student growth. Diagnostic assessment that probes prior knowledge, often categorized alongside formative assessment, allows teachers to establish a benchmark starting point for individual students, classes, and groups of students. Understanding prior knowledge helps teachers to address any misconceptions students may have about subject-matter content.

### **How to Read This Book**

This book is divided into four chapters. Chapter 1 helps to contextualize the problems today's teachers face as they try to provide students with challenging learning experiences. Chapter 2 provides a series of conversations to illuminate how the culture we create in our classroom can influence the pursuit of challenge. Chapter 3 explores various instructional approaches to ensuring that students are challenged as they learn. Finally, Chapter 4 shows how to enact challenging lessons and work through common obstacles.

Throughout the book I've included "Stop to Reflect" sections offering concrete actions, reflection questions, and recommendations

for further growth to help you process information and apply it to your own practice. As you read, jot down notes for later reference and underline areas you want to revisit. In the margins, write questions that you wish to explore further. Because we are all at different places in our careers and have differing needs, the ideas presented here will not be of the same value or effectiveness to every reader. The purpose is to get you thinking, reflecting, questioning, and talking about learning so you can better sculpt instruction to provide students with transformative classroom experiences.

Whether you read this book cover to cover or dip in and out, on your own or in a study group, I encourage you to constantly assess the potential of what you read to improve your students' learning. In the business world, return on investment (ROI) is relatively easy to measure. In education, this task is considerably harder. Has student engagement risen? Has academic performance improved? Has the value of learning increased? Have students begun to challenge themselves at a deeper level? All these questions must be carefully considered before we can know the ROI of a given practice or strategy.

I hope you choose to challenge yourself as you assess, reflect on, and then act on improving your own practice. The reward of such effort will be extraordinary!