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EL Topic Selects

Heightening Student Engagement

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Heightening Student Engagement

Student engagement is one of the most critical aspects of learning: It can make a significant difference in how students experience school and lead to improved academic outcomes. This *EL* Topic Selects brings together some of the best recent *Educational Leadership* articles on boosting student engagement, spotlighting high-leverage instructional strategies and approaches centered on the students' experience of learning. This collection is sponsored by Corwin.

Four C's for Better Student Engagement

To increase student engagement, think of engage *as an active verb—and students as the ones doing the actions.*

Douglas Fisher, Nancy Frey, and Alejandro Gonzalez

Teachers, leaders, families, and policymakers have noted with alarm that student engagement has plummeted since schools returned to in-person learning. Many educators perceive that students' attention is constantly diverted by digital distractions, making sustained focus nearly impossible. In fact, a recent poll of 1,400 teachers across grades 4–12 found that 80 percent expressed concerns about students' engagement with classroom learning (Gradient Learning, 2023).

But we know schooling wasn't perfect in 2019; the pandemic and its consequences have highlighted problems that were hiding in plain sight. As practicing K–12 educators who've long written about various aspects of engagement, we believe a significant problem in discussing student engagement lies in how it's measured. Too often, measuring *behavioral* engagement, like physical signals of attentiveness, compliance in task completion, and the number of clicks on a digital learning platform, takes precedence. Cognitive engagement is routinely overlooked.

Real engagement isn't just engagement *of* students (signs of attentiveness and fulfilling requirements); it's also engagement *by* students, evidence that they are interacting with what they learn. Measuring "engagement by" means asking things like, How often do students pose questions about the content (not just task clarification)? Or make connections between ideas and concepts during discussions? Or act upon teacher feedback? Drawing on our experiences as educators and a book two of us coauthored on student engagement (Reeves, Fisher, & Frey, 2023), we offer four C's behind teaching practice that fosters engagement *by* students, and ways to put these four C's into practice.

1. Connections: Build the Foundation

Students thrive in classrooms filled with positive human connections. Healthy teacher-student relationships have strong potential to accelerate student learning (Hattie, 2023). But it's the *student* who gauges the quality of the relationship, so their perception matters. Students also feel connected to the learning itself when they perceive it as meaningful. Again, *perception* is key. We know why the content we're teaching is important, but do students? Two strategies can aid each kind of connection.

First, "campaign" for relationships. Fostering real teacher-student relationships, like most worthwhile efforts, requires frequency, duration, and intensity. So, identify a hard-to-reach student in your class and seek to establish (or rebuild) a relationship with them. Every day, for 10 days in a row, engage in a two-minute conversation with that student—in the

hallway, during lunch, or in the bus line. Follow one rule: don't talk about school (Wlodkowski, 1983). Find out about their interests and let them learn a bit about you. Then identify the next student in need of connection and repeat the cycle. Doing this strategically throughout the year helps you continually reinvest in relationships.

The second strategy is *baking in relevance*. Relevance in learning can play a key role in student engagement—but relevance is mediated by the *student's* perception of the curriculum's value. At the lowest end of the scale of relevance posited by Stacy Priniski and her colleagues (2018) is *personal association*. For instance, a science teacher providing instruction about oceans may ask who has been to a beach before. While well-intentioned, the effect is short-lived. *Personal usefulness* is more sustained; the student sees how they can use what is being taught. That same science teacher might demonstrate how concepts about ocean temperature and wind speed will be used as variables in an upcoming lab experiment on hurricanes. At the highest level of Priniski's continuum is *personal identification*, in which learners link content to building their present and future identities. Sharing information on the high demand for data scientists and meteorologists could help students connect this content to possible future career identities.

Make relevance an intentional part of your daily practice by telling students why their learning is important. Why are we learning about word spacing in writing? *Spaces help our readers read what we've written*. Why are we learning about the product property of exponents? *Mathematicians use this as a tool to make very large calculations simpler.* When possible, link relevance to students' personal interests. *Taylor, you're a skateboarder. Check out how lift and thrust make it possible for you to do those big ollies*.

2. Conditions: Cultivate a High-Expectations Atmosphere

Students are incredibly sensitive to the expectations of their teacher. In one study, two groups of students in grades 2–7 who had similar levels of reading achievement at the beginning of the year showed markedly different achievement at the year's end (Rubie-Davies et al., 2020). The variable was the teacher's expectations: Students with teachers who overestimated their ability outperformed those whose teachers underestimated their ability.

High-expectations teachers set challenging learning intentions and success criteria, develop academic goals with their students, and rely on heterogeneous grouping. In contrast, low-expectations teachers ask more close-ended, low-level questions, group by ability, spend more time repeating directions, and reserve praise for correct answers (Rubie-Davies et al., 2015). To support high expectations, it's key to pair challenging learning goals with regular feedback so students can monitor their learning. Especially at the beginning of teaching content, assess formatively, using the learning intentions and success criteria in each lesson. Provide students with frequent opportunities to gauge their progress.

Research on teacher expectations reveals that even when low-expectations teachers try to differentiate lessons according to students' learning profiles, they ignore a central principle of differentiation: that the learning students ultimately achieve should remain constant while the paths to get there vary (Tomlinson, 2017). We telegraph low expectations when we accept a lower standard of work from a student in a misguided attempt to be kind. Instead, if a student struggles with the learning intention, scaffold and support their learning. Using heterogeneous groups—with academic diversity in each group—is one way to provide support, especially if a teacher designs group tasks such that collaboration is essential for success.[1] For instance, a math teacher we work with hosts a 15-minute Mastery Monday each week. Each learning group selects one math problem from last week's challenge set that gave at least some kids in that group difficulty, and the group makes another attempt to solve it together.

A warm classroom climate also supports high-expectations teaching by giving students an emotionally safe space to learn. Pair student feedback with high expectations and warmth: *I'm giving you this feedback because I have high expectations for you and I know you can reach them*. Use digital voice feedback extensions like Mote so students can hear your supportive tone of voice, not just read your words. And deliberately foster an emotionally supportive peer climate. Students must understand that help-seeking is an essential dimension of learning at high levels. Teachers can

create posters with sentence frames for offering and accepting help or create a "help wanted" area in the classroom in which students can post requests. Peers can be taught phrases to say to each other as emotional scaffolds (such as "We can do hard things. Let's keep going") and students can be encouraged to ask themselves: *Have I offered help today—and accepted help? Have I asked for help today? Have I politely declined help because I wanted to keep trying?*

3. Challenge: Choose Policies that Encourage Persistence

The failure in how educators talk about failure is that while we claim it's essential for learning, grading policies tell students otherwise (Reeves et al., 2023). Teachers tell students a growth mindset is important, but then grade them on every attempt to learn. Students sometimes find themselves so far behind that within a matter of weeks, they realize they can't overcome the point deficit no matter what. Engagement plummets: the hoodie goes up and the head goes down.

Grades are often perceived as a mechanism for motivating disengaged students—but they rarely are. The field knows a lot about what *does* motivate kids to challenge themselves, including:

- Feeling competent at what one is doing.
- Understanding the significance of what one is learning.
- Receiving actionable feedback about next steps in learning.
- Having opportunities to make decisions (Reeves et al., 2023).

Two overall practices help educators revise their grading policies to maximize these research-proven motivators. First, separate product and process. Grades should be used to report academic progress compared to the standards being taught. But in many cases, a single number or letter is used to also convey a stew of *non*achievement factors, including behavior, attendance, and effort. This practice demotivates many learners.

The solution: Separately grade product criteria (which capture students' academic performance toward goals and reflect how they demonstrated learning) and process criteria (which reflect *non*achievement data that impact learning, like citizenship, peer relationships, and persistence). A more nuanced grading system makes it possible to report, for instance, that a skilled learner has problematic habits when it comes to collaborating with others—or to acknowledge a student who is not yet achieving at expected levels for his resilience (Guskey, 2020).

Another way to make grading serve motivation is to reconsider what goes in the gradebook. Practice work throughout the unit, such as in-class assignments and homework, should be collected and returned with feedback. However, this is practice, not the game; performance on it shouldn't contribute to the overall points earned. Reserve points for end-of-unit assessments of learning. We've successfully used such competency-based grading practices for 15 years at the school where we work. We also allow students who don't initially earn a passing score to retake another version of the exam after they've completed the unit's homework and attended tutorials (which cultivates persistence, resilience, and help-seeking). Students' motivation is reset because they've received actionable feedback, made a choice about whether to get help, and (hopefully) feel competent.

4. Control: Give It to Students!

Where does control of learning truly reside? Here's the news: it's not with us. Educators can create conditions and use evidence-based teaching practices, but it's the student who's in the driver's seat when it comes to learning. This doesn't mean we should fall back to the "I taught them, but they didn't learn" excuse; it means we should intentionally change instructional practices so that students drive their own learning.

Sharing control involves teaching self-regulation. When students have habituated to an external locus of control, they look to us for what to do next; this reduces the teacher to a supervisor of tasks. Strengthening students' internal locus of control requires boosting their self-regulation skills, especially their ability to do six things:

- Know their current level of understanding.
- Know where they need to go next in learning.
- Select tools to guide their learning.
- Seek feedback and recognize errors as opportunities to learn.
- Monitor their progress and adjust their learning.
- Recognize their understanding and teach others (Fisher et al., 2023).

These learning skills accelerate achievement because they cultivate active learning—and give students confidence to take on challenges.

Talk with students individually

about their results from initial assessments and learning intentions you've set, to help them understand where they are in their learning and where they are headed. Create more opportunities for students to exercise choice and decision making, and regularly schedule events through which students actively seek feedback. For instance, at a designated time each week, have students leave a piece of work on their desks for their peers to provide feedback. All members of the class rotate from one desk to the next, leaving signed sticky notes offering tips and advice.

A second strategy that helps students control their learning is empowering them to set their own goals. As students develop self-regulatory dispositions, they'll be better equipped to set goals and monitor progress toward them. In conferences, help students, especially disengaged students, formulate self-referenced, "personal best" goals. For example, reluctant readers aren't necessarily going to be motivated by a grade-level Lexile goal that seems too distant. Better to set incremental goals that let them gauge progress, not just mastery (*Your reading gains this last month went from a 240 Lexile to a 280! That's your personal best. What's next?*) Equip learners with the means to monitor their own progress, such as tracking how many pages they have read or how many math problems they have completed.

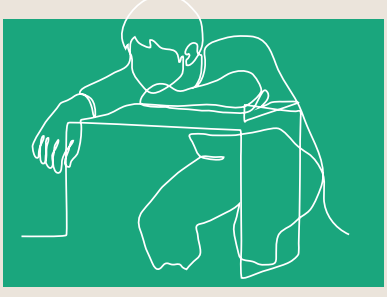
Tuning Them in to Learning

Getting students tuned in to learning requires more than getting them to pay attention and fulfill schoolwork requirements. It means seeing to it that students are enthusiastically engaging with content and fellow learners. Let's set up conditions to encourage such active participation. By thinking beyond the "grades-as-rewards" box in terms of motivation and focusing on the four C's discussed here, we'll increase the odds that students will focus on their learning, no matter the distractions.

[1]We form groups in our classes by drawing two students from somewhere in the top half and two from the bottom half

What to Try When Students Can't Focus

You've created a station-rotation lesson. Ten minutes in, you see students' attention drifting; they're surfing the web or checking their phones, seemingly unable to focus. Don't blame the devices, says James M. Lang, author of *Distracted: Why Students Can't Focus and What You Can Do About It* (Basic Books, 2020).



His book acknowledges that getting students to focus can seem like the Holy Grail. Lang shares approaches—from research and his observations of many classrooms—for garnering that attention. Chapters explore five key aspects of learning that compel students' attention: Community (the "least distracted class" Lang observed was one where the teacher regularly drew out all voices and connected students); curiosity; assessment; structure; and novelty (artists of all kind use these last two). Including assessment may seem odd, but many kids do focus when tested. Lang explains how to "take advantage of the attitude-focusing power of graded assessment without the collateral damage grades can cause."

Just as teachers hope to do for students, Lang (director of the D'Amour Center for Teaching Excellence at Assumption University in Massachusetts) hopes to draw educators' focus away from "distractions" toward engaging kids:

> **We've been sidetracked in recent years by assertive voices who lay the entire blame for our distractible natures at the feet of our laptops and phones . . . [but] teachers have always wrestled with capturing and sustaining students' attention. We need to turn our heads away from distraction and toward attention. Our challenge is not to wall off distractions, [but] to cultivate attention and help students use it in service of meaningful learning.**
>
> ***—Naomi Thiers***

of a list of our students ranked by their current assessment information. These groups collaborate for about a month and then current assessment information is used to reform the groups.

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Reflect & Discuss

Have you found your students were more easily distracted the last year or so than they were before most schools went all-remote? Why do you think that is?

What steps could you take to help students see greater relevance in their learning? Or to create a "warm" classroom or school climate of high expectations?

Using AI to Fuel Engagement and Active Learning

Used in combination with creative human intelligence, artificial intelligence can transform the way students experience school.

Amy Holcombe and Steve "Woz" Wozniak

"What's your favorite subject?"

"Recess," she promptly replied.

"What's your second favorite subject?" I asked.

Noelle, the precocious 2nd grader and burgeoning artist who had mastered reading at the age of 3, answered, "Dismissal!"

Despite the presence of supportive adults and a nurturing learning environment, Noelle found herself disengaged from school. Spending long hours confined to a desk for 180 days a year did not ignite her passion for learning. Instead, she thrived outdoors, enjoying activities like bug collecting, devouring books, and sketching the bats that flew out of the bat house she got for her birthday. While her curiosity knew no limits, school failed to engage her in exploring, thinking, and problem solving. To Noelle, it was a place where teachers imparted knowledge and students listened dutifully.

Like Noelle, most children possess an innate curiosity and drive to acquire knowledge. They exhibit boundless enthusiasm for experimentation, skills acquisition, and problem solving. This is evident when observing them at zoos, children's museums, playgrounds, or engaging in imaginative play with friends. These stimulating environments, where children are *active* participants in their learning as opposed to passive recipients of information, yield 100 percent engagement. As educators, our greatest challenge is replicating these engaging learning experiences within the confines of four classroom walls filled by 30 desks and limited resources, a scenario designed to educate the masses. Impossible to reach a 100 percent engagement level? No. Challenging? Yes.

New artificial intelligence (AI) tools are rapidly making it *less* challenging to break down the proverbial classroom walls and create more interactive and engaging learning experiences in schools. AI encompasses a wide array of applications that can be used in K–12 education. These include robotics, natural language-processing models, image and music generation tools, automated planning and scheduling, machine learning, and knowledge-based systems (U.S. Department of Education, 2023). Many educators have become early adopters and champions of AI, using it as a pedagogical tool to enhance student

engagement and motivation for learning (Quizlet, 2023). Already, we are beginning to experience the ways in which AI can increase engagement in the classroom while also reducing the rote work of teachers.

But there is more to be done. We believe that *artificial intelligence* (machine learning) powered by large language models and prompted by *actual intelligence* (the human brain) can significantly increase engagement for students like Noelle. Here are some examples.

Creative Ways to Use AI

From simple idea generation to the use of AI chatbots for research to working with customized GPTs (generative pre-trained transformers) targeted at specific content areas, teachers are experimenting with AI to level-up learning. The following student engagement activities are each based upon Steve's model:

Artificial Intelligence
+ Actual Intelligence

Increased Student Engagement

This model relies on machine learning to support more authentic learning experiences for students. We tested each of these activities with the most widely used natural language GenAI tools, including ChatGPT, Gemini, Claude, and Perplexity. The generated results were of similar quality and usability; however, we anticipate that these, and other tools, will rapidly advance in their usability as the technology improves.

As with any GenAI tool, the output quality increases in relation to the quality of the input. For best results, teach students how to provide detail and specificity in their prompts (the question or input that is provided to the GenAI model) and then take advantage of the "ask follow-up" option provided to increase the quality of the output.

Gather Facts Quickly

Remember those early research projects when your class spent a week going to the school library, using a card catalogue to find resources on a topic? Educators are now well-aware that basic facts are readily available online and that it is students' *transformation* of them into new products that holds the real educational value. Shorten the fact-finding process by teaching students how to use AI to quicky gather information, allowing more time for complex information-processing tasks that require "actual intelligence," such as fact-*checking* and analysis. After inputting a prompt to gather facts (and vetting those facts), students should activate their "actual intelligence" to transform those facts into new products such as a comparison paper, presentation, speech, or diorama.

Sample prompt: *Create a content matrix for beavers, nutria, groundhogs, and muskrats that compares their scientific name, physical characteristics, preferred environment, and behaviors.*

Create Accessible Content

Student engagement increases when content is both culturally relevant and accessible. To enhance content accessibility, educators are turning to AI to adjust the reading level for mixed-ability groups within a class and are translating content into students' primary languages, catering to diverse learning needs with great efficiency. After inputting a prompt to revise the text level, students can then complete the teacher planned activity for that particular lesson without the barrier of accessibility.

Sample prompts: *Rewrite this passage at a 3rd grade level.* [Or] *Translate this passage from English into Spanish.*

Craft Case Studies

AI tools efficiently create content, such as case studies or scripts, saving educators time. By inputting a prompt with parameters such as audience, voice/tone, and length, educators can receive tailored case studies in seconds, enhancing student engagement in complex problem-solving discussions with real-life simulations. Students can further engage in the content and ideas through role-play, debate, or by writing persuasive arguments to convince others of their viewpoints.

Sample prompt: *Create three single-paragraph case studies depicting the experiences of the British, French, and Germans following the signing of the Treaty of Versailles. In each case study, identify the country's main motivations and explain the conflicts they had with each of the other countries.*

Gamify Learning

Enhance learning through gamification by using AI to create interactive activities like word walls, Jeopardy or game boards, scavenger hunts, crossword puzzles, and vocabulary games. Introducing novelty into the learning process boosts student engagement and retention of content.

Sample prompt: *Create a Jeopardy Board for the novel* To Kill a Mockingbird.

Generate Activities

One of the more popular uses of AI by educators is to brainstorm grade-level learning activities that are more engaging than what they've done previously or than what is suggested in their curriculum materials. The AI tool will first deconstruct the learning standard, breaking it down into its fundamental components. Then it will generate learning activities designed to engage students with the content by drawing from the best ideas from across the web. To explore a single suggestion further, use the "ask follow-up" option for more details and how-to's.

Sample prompt: *Generate a list of highly interactive activities that are appropriate for teaching a 4th grader about the causes of day and night and the phases of the moon.*

Stimulate Writing

Many teachers use RAFT (role, audience, format, topic) as a structured framework for increasing writing engagement. This entire process can be modeled and taught to students using AI. As a whole group, students can practice writing AI prompts—changing out the role, audience, format, and topics—and quickly review how the output of the AI tool changes. After sufficient modeling, challenge students to create their own RAFT writing sample. They can then feed it into an AI tool for personalized recommendations on increasing clarity, tone, organization, or even to serve as a grammar checker.

Sample prompt: *Generate a 200-word letter written from the perspective of an atom, asking the Cavendish Laboratory not to be split.*

3 Tips for Citing AI in Student and Teacher Work

1. Note the way AI is used in an assignment (e.g., was it used for brainstorming, inspiration, revising, or generating the content?).
2. Name the AI tool used.
3. Provide the prompt used.

Personalize Tutoring and Test Preparation

Using AI to study smarter is one of the most cited uses by students. AI is a highly effective tool for engaging students in previewing and reviewing content by generating vocabulary games, feeding questions at different DOK levels, summarizing complex material, reviewing processes, and more. When students use AI to craft their own study experiences, they are more engaged and motivated to learn the content.

Sample prompt: *Create a match game to teach me the parts of a plant cell.*

Write Songs for Learning

There is much research linking music to information retention. Teachers and students can select a well-known tune and ask AI to generate a content-related song using that melody. Challenging students to use AI to write a first version or even a first verse followed by further student-written verses will not only create a highly engaging learning activity but will aid in moving the information into long-term memory.

Sample prompt: *Write a song to the tune of "Happy Birthday" to teach me about Marie Curie.*

Generate Choice Boards

Nothing is more engaging than getting to choose how you learn. Provide a curriculum standard, grade range, and number of choices and let AI do the hard work of generating assignments. Present the choice board to students, allowing them to select which activities they will complete to demonstrate mastery.

Sample prompt[1]: *Create a choice board for 8th graders with 10 options for mastering the following curriculum standard: Analyze the relationship between trade routes and the development and decline of major empires (e.g., Ghana, Mali, Songhai, Greece, Rome, China, Mughal, Mongol, Mesoamerica, Inca, etc.).*

Produce Plays

Do you want to engage all your students in active learning? Ask AI to generate short plays, complete with stage design tips, costuming, narration, and dialogue around a topic. Divide the class into groups, each with a different AI-generated play, and challenge them to produce the play for the class, interpreting the script by acting it out for themselves and their peers as they gain a deeper understanding of the content.

Sample prompt: *Write a five-page script at a 9th grade reading level for a play about the Boston Tea Party that presents the perspectives of both the British government and American colonists. Provide stage design tips,*

costuming, narration, and dialogue for six characters.

For those seeking more inspiration, Facebook and Instagram have a multitude of groups dedicated to the use of AI in K–12 education. Popular tools being used by educators include but are not limited to MagicSchool, Mizou, Diffit, Khanmigo, Hello History, Curipod, Parlay Genie, Teacher's Buddy, Eduaide.Ai, Brisk Teaching, Twee, LingoTeach.ai, Gibbly, and PI. Teachers are largely leading the way in the development of these tools and are even monetizing GPTs by developing and offering them to others in the field seeking to save time.

Looking Around the Proverbial Corner

It is expected that AI will soon become a standard tool for all educators, akin to textbooks or computers. As its adoption grows, the need for regulation will rise in tandem. In 2023, the U.S. Department of Education published its report *Artificial Intelligence and the Future of Teaching and Learning*, which includes definitions of terms, explanations of new technologies, and guidance on the appropriate use of AI tools. Nonprofit organizations such as the Consortium of School Networks (COSN) and AI4K12.org have crafted guidelines for AI use in classrooms, in addition to an increasing number of states and districts.

In general, there are three best practices for the transparent use of AI in teacher and student work. To cite AI use in instruction, Steve suggests:

1. Noting the way AI is used in an assignment (e.g., was it used for brainstorming, inspiration, revising, or generating the content?).
2. Naming the AI tool used.
3. Providing the prompt used.

As with any technology, the increased adoption of AI will lead to both innovative practices and unintended consequences. For example, overreliance on the use of AI may lead some educators to stray away from state mandated curriculum standards in favor of novelty activities. Further, a lack of training may lead to the misuse of AI, failure to cite original sources, or even the spread of misinformation when facts are not checked. As educators, we must take these lessons of experience and learn from them so that we mitigate any collateral damage while realizing the benefits of combining AI with actual intelligence to achieve increased engagement for all students. AI is not a substitute for human connection but rather a support for teachers. It cannot replace the "human element of teaching, which includes empathy, creativity, and adaptability to unique learning needs" (Greene-Harper, 2023).

When used in purposeful ways by talented educators, AI offers the potential to personalize learning engagement for all students, ensuring that actual intelligence will always carry greater value than artificial intelligence. And for learners like Noelle, AI allows them to become active participants in their own learning, offering limitless paths to engage with data, information, and other students in ways that are beyond our current imagination.

Reflect & Discuss

How could you use AI in the classroom to strengthen your students' critical thinking skills or "actual intelligence"?

Which activity suggested by Holcombe and Wozniak piqued your interest the most? How could you incorporate it in an upcoming lesson or introduce it to staff?

[1]Sample prompt from the North Carolina Department of Public Instruction's social studies standards.

Authors' note: Portions of this article were edited with Perplexity AI, using the prompt, "Rewrite for clarity."

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New Thinking About Student Engagement

Research models show what engagement really looks like.

Douglas Fisher and Nancy Frey

Consider how often classroom observation forms ask how many students are engaged during a lesson. Standard procedure is to look around the room and count the number of students who appear to be doing what they've been asked to do. The problem is that this limited view of engagement narrows a complex task to strictly outward signs of behavior. Are they looking at the teacher? Check. Taking notes? Check.

But what about that student looking out the window? Or the one rifling through a backpack? Are they engaged? The answer would seem to be *no*. But the window-gazing student could be thinking deeply about a rhetorical question the teacher just posed. And the topic at hand might have sparked a connection for the backpack-rifling student, who wanted to find her book to look at a key passage.

Herein lies the problem: Engagement isn't simply about low-level compliance. Indeed, existing and new research can help us understand engagement, and how to identify it, in a new light.

The Three-Dimensions Model

An older model of student engagement proposed by Appleton and colleagues suggests that it occurs across three dimensions: behavioral, cognitive, and affective.[1] Behavioral engagement includes behaviors and actions. Readily observable indicators like participating in class discussion, following classroom rules, and completing assignments are frequently cited as evidence of this.

Cognitive engagement is an indicator of the psychological effort students exert. Cognitively engaged students are monitoring their understanding and making connections with the new learning. This is more difficult to identify based on outward actions only. That student who was gazing out the window might have in fact been cognitively engaged while reflecting on her learning.

A third dimension is affective engagement—how students *feel* about their learning. Students who are emotionally engaged are interested and curious about the content. Perhaps the student who pulled a book from her backpack had been surprised at some information the teacher shared and wanted to compare it to something previously read. She was responding emotionally to the content, eager to satisfy her curiosity.

Truly engaged learners draw on *all* three dimensions. A student who is only behaviorally engaged may go through the motions of schooling with little investment in the learning (yet *look* engaged). One who is cognitively but not affectively engaged may lack the will to persist when learning gets more difficult. And a learner who is only emotionally engaged may feel great interest in the subject but put forth little effort.

Bridging Theory to Practice

Though Appleton's model has much merit, teachers need a model that more explicitly bridges theoretical constructs to what engagement looks like in the classroom, so they can recognize engagement and teach students what it looks and feels like. Australian researcher Amy Berry has provided

exactly that.[2] Through interviews with teachers about their descriptions of indicators of engagement and disengagement, she developed a continuum of engagement and disengagement that weaves theoretical principles with classroom application (see Figure 1) and helps teachers gauge more precisely how much kids are engaged (or not) in learning.

Berry found most teachers centered on the "doing" aspect of learning—the behavioral dimension. But she recognized that a student's degree of passivity or activeness within school also influenced their investment in learning. She located behavioral-only engagement on the more passive end of her continuum and called this category "Participating." Some teachers also described passive *disengagement*, which led Berry to extend the continuum in another direction to create the passive disengagement category of "Withdrawing."

In addition, Berry found, students can be *actively* engaged or disengaged. Students with a somewhat high degree of active engagement ("Investing") ask questions about the content and seek relevance in what they're learning. Somewhat actively disengaged students ("Avoiding") try to evade work, such as with off-task behavior.

Now consider high levels of active disengagement and engagement. Those with a high degree of active disengagement disrupt learning for themselves—and maybe others. But students with an active stance and a high degree of *engagement* drive their own learning. They set goals, seek feedback, and gauge their learning.

Here's what's exciting: higher levels of active engagement correspond to better learning. The teachers Berry interviewed described their students' relative level of learning as it related to the active-engagement continuum.

FIGURE 1. A Continuum of Engagement

ACTIVE ← PASSIVE → ACTIVE

Disrupting	Avoiding	Withdrawing	Participating	Investing	Driving
Distracting others Disrupting learning	Looking for ways to avoid work Off-task behavior	Being distracted Physically separating from group	Doing work Paying attention Responding to questions	Asking questions Valuing the learning	Setting goals Seeking feedback Self-assessment
DISENGAGEMENT			ENGAGEMENT		

Note: This figure is based on Amy Berry's research on teachers' perceptions of engagement (Berry, 2020).

Students who were more actively disengaged, the teachers noted, learned less. Teachers saw that when students' engagement (even those in the "Disrupting" category) moved to the right on this continuum in a learning situation, this resulted in incremental increases in learning.

Teaching About Engagement

Berry's work has inspired some educators to teach students about how their own level of engagement influences their learning—and how they might progress. In the video that accompanies this column, high school history teacher Thomas Tutogi introduces the continuum to his students and allows them to co-construct indicators of engagement and disengagement. It's important to note that he teaches them about monitoring their own investment in their learning. He sets them up to self-assess their level of engagement at the end of every class and provide evidence for their claims.

Mr. Tutogi's students are learning to evaluate their own thinking and behavior in school and to self-regulate to help themselves learn better. Teaching students about the importance of true engagement, rather than compliance, could do a lot to foster student ownership of their learning.

Watch the Video

Watch a high school history teacher work with his students on self-monitoring their own engagement levels at www.ascd.org/el/articles/new-thinking-about-student-engagement.

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What Can Teachers Do to Engage Anxious Students?

For students with anxiety, the path to engagement requires both accommodations and skill building.

Jessica Minahan, Sarah Ward, and Kristen Jacobsen

Juan asks to go the bathroom for the third time during math. Sue Lee gets easily frustrated and weepy when the teacher redirects her to a writing assignment. Sam has their head down and appears to be sleeping again during science. What do they have in common? *Disengagement*: one of the most common challenges educators face. When a student fails to participate, initiate a school task, or complete a task, it can halt a lesson, consume educators' time, and further demoralize both the educator and student. Students who are chronically disengaged are at risk for academic failure, behavior issues, social isolation, and other poor outcomes.

Many of these students struggle with the executive functioning skills required for task initiation, attention, planning, and organizing. However, addressing these skills with well-known executive functioning strategies alone can fall flat unless another aspect of disengagement is addressed: student anxiety. Anxiety has *doubled* in children and adolescents during the pandemic (Racine et al., 2021) and can cause weaknesses in these crucial areas of executive functioning, as well as in accurate thinking and independence. Left unaddressed, this volatile mix can play a major role in increasing disengagement.

The path to engagement, therefore, requires a focus on (1) anxiety-reduction, and (2) a combination of explicitly taught accurate thinking and executive functioning skills.

How Does Anxiety Affect Engagement?

When a student's anxiety increases, several other skills are negatively affected, including working memory (the ability to hold information and retrieve it as needed); self-regulation (the ability to adapt, emotionally and behaviorally, to the current situation); executive functioning skills (the ability to visualize future goals and complete the steps to achieve them); and accurate thinking (McEvoy et al., 2019; Moran, 2016).

There are several types of *inaccurate* thinking that are commonly associated with anxiety: "thinking on the downside" (assuming the worst will happen, which further escalates anxiety); all-or-nothing thinking (*I am terrible at math!* rather than *I am just struggling with long division*); and catastrophic thinking (*If I fail this quiz, I'll need to repeat 8th grade*). When these overwhelming thoughts flood an anxious student, executive functioning strategies alone (such as graphic organizers or rubrics) won't be enough to help them initiate an activity. These pervasive negative thoughts can also lead to problematic behaviors such as avoidance, disengagement, arguing,

and shutting down.

Many students suffering from anxiety can get caught in a debilitating cognitive cycle: Poor executive functioning can cause a student to be anxious in school, and anxiety can cause poor executive functioning and inaccurate thinking, which in turn causes disengagement. By incorporating strategies to reduce inaccurate thinking and increase executive functioning skills, we can help students become more engaged.

But where exactly do we begin? With the simple process of *starting* and *ending* a task.

Where Engagement Starts (or Stops)

By asking anxious students to start an activity or persist on a task, we may be asking them to do something they don't have the skills to execute. Engagement requires support at each stage of readiness. Here we will break down the components of a transition to illustrate the different skills required to stop, shift, or initiate a task and prescribe strategies that can help students gain the necessary skills to engage in work independently. Here's the flow:

> Setting up for engagement → Stopping the first activity → Making a cognitive and physical shift → Initiating and engaging in the activity

Setting Up for Successful Engagement

Students sometimes balk when asked to start an assignment, but there's a common factor in this resistance that we can actively address. The most difficult transition we can ask of students is from a preferred activity to a non-preferred activity (e.g., "Recess is over. It's time to take your math quiz!") and this process can almost guarantee a problematic response (Minahan, 2014). It's difficult for the student to stop a preferred activity, let alone initiate a dreaded one. It's like jumping into cold water, and it's a set-up for resistance.

Instead, when we know a transition will be a challenge, we can ease students in gradually by adding an intermediate step: "Come in from recess and you can draw." Once the student is drawing at their desk, they are engaging in most of the variables you need for them to do math: sitting in a chair, holding a pencil, and touching a piece of paper. Now, you are only asking them to shift to a different piece of paper. That behavioral momentum can allow them to transition smoothly.

First: Stopping the Initial Activity

The typical transition warning in classrooms is the five-minute countdown: "Five more minutes and then we need to stop reading and put our books away!" We assume that it's an adequate prompt, but we also know that, inevitably, several students will not actually stop reading in five minutes. Judging time, pacing, and making a plausible plan to be accomplished in five minutes is quite difficult, and the simple countdown prompt doesn't support the development of these skills.

In order to stop, students need a plan (Minahan, 2014). Students may need explicit instruction about how to find a stopping place and pick an activity that is a good match for the time allotted. Check-ins ("What's your five-minute plan?") can illuminate a student's *inaccurate* plan ("I will finish the book") and help the student recalibrate: "Actually, in five minutes you can only get to the end of this chapter. That is a good stopping plan." We can also give directions that include an action plan: "Five more minutes, which means finish the math problem you are on—don't start another one." This level of specificity increases the likelihood of a smooth transition and improves the student's ability to make an effective five-minute plan in the future.

Another strategy for ending an activity is to use the word *pause* instead of *stop* (Minahan, 2014). The word *stop* itself is an all-or-nothing term that can elicit all-or-nothing thoughts: the student can hear "stop" as "this needs to be completed and perfect," making it hard for them to stop when this isn't the case. However, they can typically *pause* without distress or misunderstanding.

We can also make time visible. Visual strategies, such as drawing the beginning and end times on an analog clock with a dry erase marker, can help students visualize time goals. As opposed to a countdown timer, which can spike anxiety, seeing the available volume of time on an analog clock facilitates metacognitive thinking about how to use the time available (Ward & Jacobsen, 2014a). You can also place sticky notes on the clock with goals for each chunk of time (see Figure 1). Students can use these time markers to track their progress, self-monitor, and know when they need help.

Second: Cognitively and Physically Shifting to the Next Activity

Before transitioning physically to the next activity, students must make a mental shift: They have to stop thinking about science, for example, and start thinking about math. They then must visualize the items needed (*For math I need a calculator, my math journal, and a pencil on my desk*) and physically gather those materials. Teachers often verbally walk students through this process, which helps the students get ready for class but doesn't build the skills they need to do it independently.

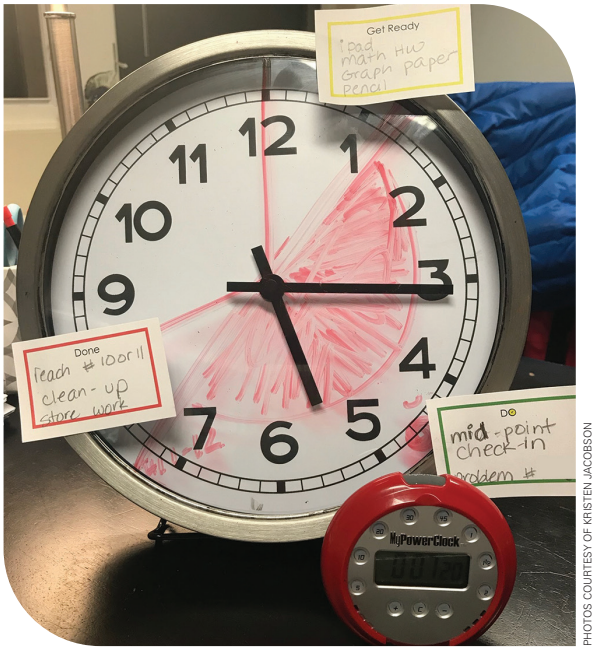
Instead, try a visual approach: Take an aerial photograph of a student's desk labeled "ready for math journals" that displays, from first person view, where the pencil, calculator, and math notebook are placed (clip art and visual picture schedules are poor substitutes for photographs). Project this to the class when you give the direction, "get ready for math journals." Students can simply arrange their desk to match the photograph, taking out their materials without adult support. Over time, with repetition of the same photograph and prompt pairing, the routine will become encoded into students' long-term memory storage (Ward & Jacobsen, 2014a; Minahan, 2014).

Third: Initiating and Engaging in the Next Activity

Anxiety and executive functioning challenges significantly affect the ability to initiate an activity. In this third step on the path to engagement, we need to provide accommodations and teach the necessary skills to reduce inaccurate negative thinking associated with anxiety and increase the mental imaging skill of task execution. As always, we should start with supportive accommodations.

When a child learns to ride a bike, we provide training wheels until they can ride independently. Similarly, we should provide accommodations to support students to initiate while explicitly teaching new skills. To encourage independent initiation, educators will need to begin by providing accommodations to compensate for the student's inability to initiate, while explicitly teaching strategies to allow them to become independent. If we remove the accommodations before the child has built the skills they need, they'll crash.

FIGURE 1. Making Time Visible



PHOTOS COURTESY OF KRISTEN JACOBSON

Accommodations for initiation need to address both executive functioning skill deficits and inaccurate or negative thinking associated with disengagement. One accommodation that supports executive functioning skills in students is the *Get Ready*Do*Done* strategy (see Figure 2).

We like to tell students, "Plan your work then work the plan!" But to explicitly teach the executive functioning process of "planning backward to move forward" for completing tasks and assignments, this multisensory method does the trick (Ward & Jacobsen, 2014b). Students start by asking the following questions when looking at the *Get Ready*Do*Done* planning template:

1. What will it look like when I am "done"?
2. What steps do I need to take or "do" to match my done image?
3. What materials and/or strategies will I need to "get ready"? Are there any obstacles or time

robbers I can anticipate? What's my plan to prevent those obstacles?

When students engage in this visualization, they break down tasks into required steps to achieve the envisioned goal. Having a specific place to start can be less overwhelming and help them initiate. This process is first modeled by the teacher; but gradually, students will learn to assist in and create their own assignment plans.

Another go-to strategy to use for helping students initiate and engage in the next activity is to create a "future sketch" (see Figure 3) of what an open-ended or complex multistep assignment will look like. In the example shown, students were directed to: "Create a poster with a title and five pictures. Be sure to include captions for your pictures."

This strategy can help students visualize the outcome and sequence the steps, allowing them to more accurately size up a task and preventing them from shutting down at first glance of the directions (Ward & Jacobsen, 2014b).

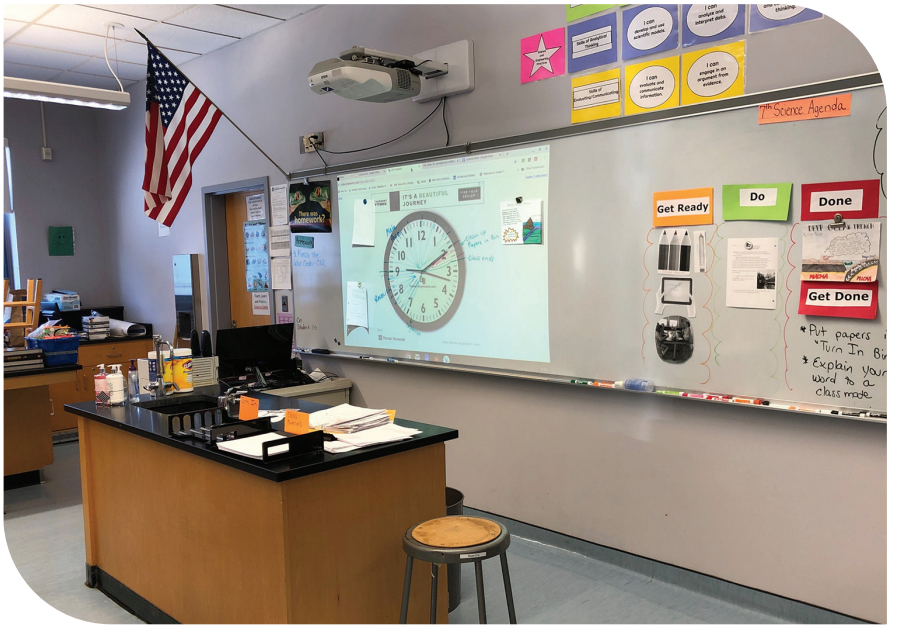
Working With Inaccurate Thinking

Negative and inaccurate thoughts can derail initiation altogether, causing an anxious student to be unable to engage in schoolwork for reasons that are invisible to others. When we suspect that negative thinking is at work, it should be measured—not assumed—through data gained from interviewing the student about their thoughts and perceptions of the task difficulty, and their ability to be successful with the task. Students can even express this information independently through personal thought journals.

Two accommodations in particular can help anxious students change the thoughts that are preventing them from initiating a task. The first is "Rating the Difficulty." Because writing is difficult to initiate for many anxious students, we will use writing as the example—but these strategies can be applied to any activity. First, have your student use a scale of 1–5 to rate the difficulty of a writing assignment (5 being very difficult) before and after the activity (Minahan, 2014). In the "before" column, the student might rate it "5-very difficult" due to his anxiety-fueled perception. When you ask again, hours after the assignment is completed, the student is more likely to have an accurate perception and rate the assignment as "2-not too difficult." It's important to use the rating sheet for five or more assignments so even if one day the student's pre-assignment rating is an accurate assessment, the overall pattern of inaccurate thinking will be revealed. Showing the student the rating sheet that includes several ratings (5–7 ideally) can help him realize his initial assessment is often off base and can guide him to more accurate thinking about future assignments.

The second accommodation to support the initiation step for anxious students is to "ask students to continue, not start." Teachers often hand out blank paper, explain an assignment, and ask students to begin, only to notice a few minutes later that a student hasn't started the assignment . . . again. During those six minutes, their anxiety is rising, all-or-nothing thoughts are surfacing, and the required skills are decreasing. Consider reordering this process: Help them start long *before* they are anxious.

FIGURE 2. Get Ready*Do* Done Strategy (whole-class instruction)



Pull the student aside in the morning, preview the assignment, and have them write the first sentence or do the first math problem and then start the next one, stopping mid-sentence or 2/3 of the way through the math problem. You are leaving a dangler on purpose! Then, when the assignment is handed out to the class, you hand the student the previously started paper—essentially asking the student to continue, not start. Instead of the student having an all-or-nothing thought (*I have to write three pages!*), the thought, *I only have to finish the sentence* is much more approachable, and students will often then be able to engage without their inaccurate thinking taking over.

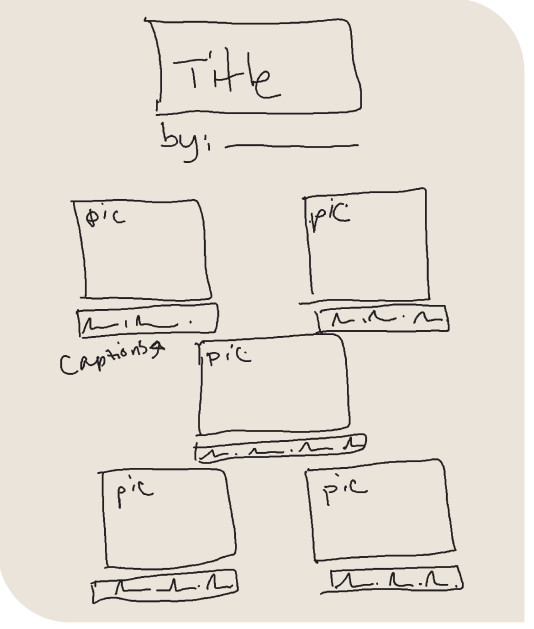
These strategies can give students a more realistic, less overwhelming view of tasks, and most important, teach them to think accurately about future assignments.

Shifting to Independent Engagement

The best way to get students to use these stopping, shifting, and initiation skills and strategies independently is to build their ability to *self-monitor*—to assess what they need and choose a strategy that will help, without relying on the teacher. Once again, a visual is a great way to move the student along the continuum. In Jessica's December 2017/January 2018 *Educational Leadership* article "Helping Anxious Students Move Forward," a sample self-monitoring strategy sheet is included that can help students independently initiate a task. If you build your own self-monitoring outline for students, incorporate the executive functioning strategies from this article and try to avoid omitting strategies that seem obvious—some students need to be taught tools that others use easily (such as chunking or positive thinking).

This self-monitoring sheet could be kept on a student's desk or as a classroom wall chart, allowing the teacher to point to the visual prompt and say, "I see you are having trouble initiating. What strategy would you like to use?" (For example, a strategy for *initiation* might be starting the assignment the day before, leaving a dangler, or using the *Get Ready*Do*Done* template.) Stating that the problem is only *initiation* supports accurate thinking because it emphasizes that a student is having trouble with *one small aspect* of the assignment, not the whole subject.

FIGURE 3. Student-Created "Future Sketch"



Eventually, the student will be able to use the chart, and strategy, without prompting.

Finally, because we get more of what we reinforce, we must reward students' strategy use or skill practice, rather than just work production (Minahan, 2014). "Catching" students using engagement strategies, such as giving them points on an activity when they use a strategy from the chart, promotes independence and application of task engagement skills, allowing teachers to increase learning time for *every* student in their diverse classrooms.

A Matter of Skill Building

The path to student engagement requires an understanding of the impact of executive functioning deficits and anxiety on students' abilities—and a focus on providing accommodations and skill building. When we give students the supports and skills they need, they can engage in school independently while gaining confidence and self-knowledge.

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Reflect & Discuss

What transition during the school day most often causes your anxious students to disengage? What strategy outlined by the authors could help?

How have you seen inaccurate thinking interfere with a student's ability to initiate, persist in, and/or stop an activity?

The Problem of Nominal Change

When we try high-leverage practices half-heartedly, no real change happens. For true change, go all in.

Jim Knight

According to the *Oxford English Dictionary*, something that is nominal "exists in name only . . . merely named, stated, or expressed, without reference to reality or fact." Having now spent more than 25 years working with organizations, I've come to see that the word *nominal* often describes how change occurs in schools. Leaders say they are implementing Differentiated Instruction (Tomlinson, 2009), Visible Learning (Hattie, 2008), Gradual Release of Responsibility (Fisher & Frey, 2008), or other models. But what's implemented in these leaders' schools bears little resemblance to the skills, beliefs, knowledge, and processes those who developed the models describe as quality implementation. *Some* change may happen as leaders make a good-faith effort toward a new approach—but too often it's not the level or kind of change the approach *could* produce. Schools implement high-leverage practices in name only.

I think I have at least a partial understanding of why nominal change is common. Few people are busier than education leaders, and leaders are anxious for change in their schools. Taking months to plan an intervention effectively seems hard to justify when students are dropping out and you're already overwhelmed with work. Also, people tend to lose interest in innovations over time. Trying out something new often seems more interesting to change leaders than going the distance with an intervention a school has been working on for years. I've felt these forces myself as I've led my organization.

There are, however, negative consequences from nominal change. If new practices aren't implemented effectively, they won't make a difference. When new practices don't have a positive impact, organizations move to *other* new interventions, which in turn get poorly implemented and eventually forgotten. This nominal change cycle—introducing new practices, implementing them nominally, and then moving on to other new practices (that will eventually be implemented nominally and rejected)—erodes teachers' commitment to *any* new initiatives. Over time, teachers come to (somewhat cynically) adopt the mantra, "This too shall pass."

Getting Beyond Nominal Change

Fortunately, there are several steps leaders can take to get out of the nominal change cycle.

■ **Begin with the end in mind.** Leaders need to be extremely clear on why they are implementing a new strategy and what will be different when that strategy is effectively carried out. They need to communicate that vision schoolwide. Clarity around the desired outcome should be a north point on a compass, guiding everyone's actions as a new practice is implemented.

■ **Identify a champion.** If an organization is going to implement a new practice, such as a certain model of coaching or PLCs, someone needs to

lead the implementation. The best champions for change are experts in aspects of the initiative being implemented—those who combine emotional intelligence, expertise, humility, and ambition for improvement.

■ **Add by subtracting.** The champion you choose needs to have time to do that leadership work. Most people who work in schools don't have a lot of extra time in their day. If they are going to add something new to their day, they will need to remove something else. Powerful change can't be an add-on; time has to be created so that the new practice can be implemented effectively.

■ **Ensure deep knowledge.** Most instructional models or practices involve many different components. My team has found that good coaching, for example, involves knowledge (of teaching strategies and data gathering), skills (at least 10 essential coaching skills), beliefs (based on existing extensive research on how people change), and a particular process. So if coaching is going to be implemented effectively, champions, coaches, principals, and teachers all need to know exactly what that model is and how long implementing it well should take. We have found, for example, that to hit a goal that leads to sustained change and unmistakably positive outcomes for students takes, on average, 6–8 weeks. And champions need to know what a new practice should look like when it is implemented so they can provide the in-depth support needed for quality implementation. To help them develop that deep knowledge, champions may need their own coaches.

■ **Plan.** Leaders who want to be successful need to take the time to plan how the key people involved will learn to do what is needed for a practice to be implemented. For example, coaches who are going to use the skill of questioning to set powerful goals with those they coach will need to practice that skill at least 10 times. That amount of practice won't happen unless leaders plan when and how it can happen.

■ **Try, test, improve.** The best-laid plans, of course, still need to be tested, adapted, and improved on. For change to be more than nominal, educators need to *measure* what works and what doesn't work, and make improvements until whatever practice they're adopting is helping teachers and students hit their goals. For example, teachers who partner with instructional coaches might set student achievement goals, gather data through the use of formative assessment, and use that data to adapt their teaching until students hit their goals.

■ ***Listen* to teachers and students.** It's a strange reality that the people who are closest to a change often have the least say in how it's implemented in a school. But teachers' firsthand experiences with what is and isn't working with an intervention can be extremely valuable for making improvements. Similarly, students' feedback is often incredibly helpful for anyone improving new practices. When it comes to understanding what works and what doesn't, students are often a great untapped resource.

Be a Difference Maker!

There is no lack of good ideas on how to improve schools. But there is a lack of quality implementation. Nominal change wastes everyone's time in a school, including students' time. Like so many things in life, taking the time to plan, learn, and improve can make a difference. Change doesn't have to be in name only.

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