TEACHING STUDENTS TO DRIVE THEIR LEARNING

A PLAYBOOK ON ENGAGEMENT AND SELF-REGULATION

GRADES K–12

DOUGLAS FISHER
NANCY FREY
SARAH ORTEGA
JOHN HATTIE

VISIBLE LEARNERS

Thank you

FOR YOUR
INTEREST IN
CORWIN

Please enjoy this complimentary excerpt from Teaching Students to Drive Their Learning.

LEARN MORE about this title!

CORWIN

INTRODUCTION

This book is about student engagement and self-regulation, but it's not about bribes and control. Rather, it's about designing experiences that allow students to learn more and better. The phrase we use to convey this idea is "teaching students to drive their learning." Teachers play a critical role in creating the conditions that allow students to do so. This playbook is designed for you to work with as you validate and extend what you know. You may choose to jump around, engaging with different modules based on what you or your team need at the time. Or you may decide to read the modules in order. You'll note that the first module sets the stage by focusing on engagement. We propose that high levels of engagement require specific actions and thinking from students and changes in classroom procedures and experiences. When students successfully reach high levels of engagement, they're not simply compliant. Instead, they drive their learning.

Following this opening module, we focus on the six factors that allow students to drive their learning (see Figure i.1). You'll note that there are many interactive features designed for you to engage more fully with the ideas in each module. We hope you, and perhaps your team, will try on these tools and make this playbook your own. In the final module, we focus on the reasons that students disengage, and we present nine cognitive challenges, and what educators can do about them, to return students to the driver's seat of their learning. But first, let's meet a real student from San Diego who exemplifies the characteristics of students who drive their learning.

> Who wouldn't want students to be leaders of their learning, to be engaged in learning tasks, and to take responsibility?

Figure i.1   Characteristics of Students Who Drive Their Learning

Assessment-capable learners

1. Know their current level of understanding
2. Know where they are going and they are confident to take on the challenge
3. Select tools to guide their learning
4. Seek feedback and recognize that errors are opportunities to learn
5. Monitor their progress and adjust their learning
6. Recognize their learning and teach others

MEET QUINN

Quinn had a history of struggle in school and, in fact, was recommended by a previous school for grade-level retention. Quinn's mom knew that simply repeating the same class with the same content was not the answer for her child. She transferred Quinn to a different school, one that was focused on teaching students to become responsible for their learning. Two years later, Quinn is performing nearly at grade level. Quinn is also much happier and more engaged with peers, learning, and school work.

The difference? Quinn and classmates have learned how to drive their learning. The idea is appealing, isn't it? Who wouldn't want students to be leaders of their learning, engage in learning tasks, and take responsibility for teaching themselves and others? But what does it mean to have students drive their learning? Let's review the experiences that Quinn has had.

On a daily basis, Quinn can tell you what the class is learning. Quinn also understands what current levels of learning mean, recognizing that there is no "bad" place to be. Quinn can identify "I know where I'm going," which is one of the signature characteristics of students who drive their learning. Perhaps more importantly, Quinn knows what to do next to further learning. The tasks teachers assign allow Quinn to engage in learning that is just the right amount of challenging—not too easy, not too hard, and not too boring.

Quinn also can select the tools needed for the journey. For example, while working on an essay, Quinn recalled prior lessons that focused on writing introductions and chose an introduction type to match the topic. On another day, Quinn asked for peer feedback on a draft, recognizing this type of support provides another learning opportunity. Quinn's teachers have taught a range of cognitive and meta-cognitive tools, but it is up to Quinn to select from them and then apply them to the learning task.

Quinn also has come to understand *what to do when you don't know what to do*. That sounds complex, but it is straightforward. When Quinn gets stuck, there are strategies in place to help get unstuck. For example, when confronted with a complex mathematical task, Quinn was not sure where to start. Rather than be stymied by this, Quinn decided to reread the problem and identify the given and the units, ask what the problem was asking, and check with a peer to validate thinking. Quinn could also seek help from teachers and peers, work backward from the answer to better understand the math ideas and steps, or rework some of the basic math ideas inherent in the task. Quinn struggled with this task but knows that there are actions that can be taken to figure out things.

> Students often wrongly believe that errors are evidence of their character, rather than an expected and welcome part of learning.
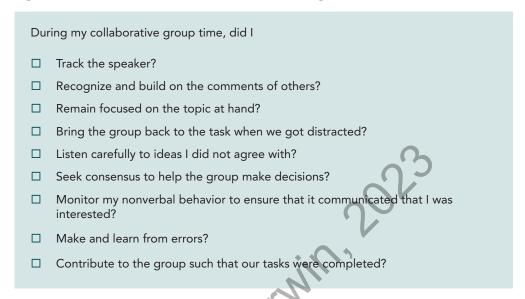
Quinn also engages in self-talk, recognizing that there are things to do to become successful in the face of setbacks or when learning progress stalls. Quinn knows that a wide range of supports—teacher and peers—is available to ensure success. In other words, Quinn is beginning to see errors are opportunities for learning. This is key, as students often wrongly believe that errors are evidence of their character, rather than an expected and welcome part of learning. Errors should never be seen as sources of embarrassment or statements about one's skills and commitment, but as wonderful opportunities to tackle the next most appropriate challenges. In Quinn's school, teachers regularly comment, "We celebrate errors because they're opportunities to learn." They teach their students how to recognize their own errors. Then these teachers leverage these errors for the learner's benefit.

Further, Quinn knows how to track progress. Of course, the teachers also monitor progress through formative evaluation of students' work and summative tasks that allow them to demonstrate mastery. But Quinn knows that responsibility is shared with the teacher, and they can monitor learning together. Quinn does not wait for feedback from others but instead seeks out feedback from peers and the teacher.

In addition, Quinn has been taught several strategies to self-assess. For example, the teachers have provided students with a checklist for assessing their own participation within the group (see Figure i.2). Quinn has come to appreciate that quality engagement with peers directly affects their collective learning. Quinn and the teachers know that learning is enhanced when students are active participants in the discussion. Quinn has discovered several skills, including getting the group back on track when they lose focus.

Figure i.2   Self-Assessment for Collaborative Learning

During my collaborative group time, did I

☐   Track the speaker?

☐   Recognize and build on the comments of others?

☐   Remain focused on the topic at hand?

☐   Bring the group back to the task when we got distracted?

☐   Listen carefully to ideas I did not agree with?

☐   Seek consensus to help the group make decisions?

☐   Monitor my nonverbal behavior to ensure that it communicated that I was interested?

☐   Make and learn from errors?

☐   Contribute to the group such that our tasks were completed?

online resources ↘ Available for download at **resources.corwin.com/teachingstudentstodrivetheirlearning**

And finally, Quinn recognizes when learning has occurred and engages in teaching others. The best exit ticket from any series of lessons is the skill to then teach others. This implies confidence in knowing and understanding what has been taught. As teachers, we know that we need to listen to others, evaluate how they are solving problems, and teach them to monitor their progress—the very skills we also want to develop in our students. While monitoring success, Quinn notes where those successes lie and which areas still require attention. Quinn communicates this with teachers (and others, including family members), working to interpret learning data and setting mastery goals. Quinn knows that learning is important and is motivated by success. This success drives Quinn to want to learn more, and the cycle starts again. As a result, Quinn is engaged in learning and uses a number of self-regulation strategies. No one had to tell Quinn to be engaged; rather, teachers focused on teaching all students in the school to drive their learning.

For many people, this sounds idealistic and unattainable. But it did happen. It happened for Quinn, a real student in a real school, with real teachers who understood the value of teaching students to drive their learning. Those teachers provided Quinn and others with specific experiences that built their competence and confidence, reinforcing the necessary characteristics that learners who self-regulate and take responsibility for their own learning possess. It's not pie in the sky but an attainable goal when school teams focus on a few things that work well. And it is not just students

who learn to think this way. Their teachers also think about their role to teach students to think, act, and become their own teachers—to know what to do when they do not know what to do. We introduced you to Quinn to show you it's possible. If you aspire to have students drive their learning, each of the factors explored above is critical to success. And the foundation for this is Visible Learning®.

WHAT IS VISIBLE LEARNING?

Visible Learning describes a constellation of efforts. It is a research database (see Meta[x], **www.visiblelearningmetax.com**), a school improvement initiative (see https://us.corwin.com/en-us/nam/visible-learning), and a call to action to focus on what works best to impact learning (Hattie, 2023). The *Visible Learning* database is composed of over 2,100 meta-analyses of the work of over 400 million students. That is big data when it comes to education. In fact, some have said that it is the largest educational research database amassed to date. To make sense of so much data, one author of this playbook, John Hattie, focuses his work on interpreting the meaning of these meta-analyses.

A meta-analysis is a statistical tool for combining findings from different studies with the goal of identifying patterns that can inform practice. In other words, it is a study of studies. The tool that is used to aggregate the information is an *effect size.* An effect size is the magnitude, or size, of a given effect. To draw an imperfect but functional comparison, consider what you know about how earthquakes are measured. They are reported as an order of magnitude on a scale called a Richter scale. Some earthquakes are imperceptible except by specialized measurement tools. Other earthquakes have a minimal "shake" that results in a small, momentary impact but no lasting effects. A few register high on the Richter scale and have a definitive impact on an area. Just as numbers on the Richter scale help us understand the effect of an earthquake, effect sizes from meta-analyses of several studies help us understand the impact of an educational influence.

For example, imagine a study that demonstrated statistically significant findings ($p < 0.01$ for example) for having students stand while learning math. People might buy stock in "standing tables," and a new teaching fad would be born. But then suppose, upon deeper reading, you learned that the students who stood had a 0.02 month gain (an effect size of 0.02) over the control group, an effect size pretty close to zero. You realize that the results were statistically significant because the sample size was large, but the size of the learning gain itself was not very meaningful. Would you still buy standing desks and demand that students stand while learning math? Probably not (and we made this example up, anyway).

Meta-analyses can also identify whether an overall effect size differs across contexts. For example, is it different in elementary school versus high school, for males and females, in San Diego or Melbourne? Understanding the effect size lets us know how powerful a given influence is in changing achievement—in other words, the impact for the effort. Some things are hard to implement and have very little impact. Other things are easy to implement and still have limited impact. Educators search for things that have a greater impact, some of which will be harder to implement and some of which will be easier to put into play. When

---

Understanding the effect size lets teachers know how powerful a given influence is in changing achievement.

deciding what to implement to positively impact students' learning, wouldn't you like to know what the effect size is going forward? Then you can decide if it's worth the effort.

John was able to demonstrate that influences, strategies, actions, and so on with an effect size greater than 0.40 allow students to learn at an appropriate rate, meaning at least a year of growth for a year in school. While it provides an overall average, often specific conditions can be more critical—such as whether you are measuring a narrow construct (like vocabulary words known) or a wider construct (such as creative thinking). Before this level was established, teachers and researchers did not have a way to determine an acceptable threshold. Thus, weak practices, often supported with statistically significant studies, continued.

Let's consider some real examples from the Visible Learning database (www.visible learningmetax.com). We'll focus on a few factors that we think of as prerequisites for teaching students to drive their learning.

TEACHER EXPECTATIONS

All teachers have expectations for their students. Therefore, there really is no point in asking the question, "Do teachers have expectations for their students?" The better question is, "Do they have false and misleading expectations that lead to decrements in learning or learning gains—and for which students?" (Hattie, 2023, p. 220). The effect size of teachers' expectations for student learning is 0.58. Let's state it another way: If teachers expect their students to learn a full year (or more) of content for a year of input, they probably will. These expectations are communicated every day, in ways that include everything from the teacher's demeanor to the challenge of tasks assigned to students. Expectations must be at the forefront as teachers plan units of study and engage students in quality learning experiences. (Sadly, if teachers expect students will not make a full year's growth, they probably will not, regardless of the student's potential, interests, prior achievement, etc.)

TEACHER CREDIBILITY

Learning is a risk-taking endeavor. It requires that the learners put their faith in the teacher's ability to lead. The credibility of the teacher inspires confidence and a willingness to be open to risk. It is also a source of motivation for students to draw on when the learning is difficult or when a setback occurs. Being able to tell oneself, "I know my teachers know what they're doing, so I'll be okay" speaks to the trust the student has in the teacher.

The teacher's credibility inspires confidence and increases the students' willingness to be open to risk.

Teacher credibility involves three constructs: "competence, character (or trustworthiness), and perceived caring" (Finn et al., 2009, p. 519). The first, competence, is related to the teacher's projected subject matter knowledge and ability to organize instruction. (Nancy recalls her six-year-old granddaughter's assessment of a substitute teacher's first day: "Nana, she doesn't know the right math!") The second construct, which is character, includes perceptions of fairness and respect. (John recalls one of his sons saying that a teacher "treated everyone the same." When asked how, John's son said, "It's not like we all get the same rewards or punishments

regardless of what we do; there is no fairness in that.") The third, which is caring, is understood by students to include responsiveness and nonverbal actions such as eye contact, smiling, and open and inviting body language. Doug recalls a professor of his who said, "I don't know how you're going to learn this, but it's on the midterm." The effect size of teacher credibility is 1.09, and it is simple: If a teacher is not perceived as credible, the students just turn off.

We chose these effects because they clearly impact students' learning and are not likely to be a surprise to educators. There is sufficient evidence to back up the claim that these three factors increase students' likelihood of learning. We'll focus on a number of effect sizes throughout this playbook and provide the magnitude of the effect for each. Of course, you can look up all of the effects—positive, neutral, and negative—on the website (www.visiblelearningmetax.com), but this playbook is about putting them into action so that students take responsibility for their own learning.

CONCLUSION

We have a goal for schools to make learning visible to every student. That's a tall order. It requires that teachers focus more on learning and less on teaching. Yes, we all use a range of instructional approaches, but is this instruction resulting in learning? That means we must know the impact we have on learning; we measure it and monitor it. And teach the students to monitor and evaluate their own progress, their strategies of learning, and their closeness to the success criteria for the lesson(s).

In order to make learning visible, we must teach students to drive their learning. Too many students are adult-dependent learners. Others are compliant learners. Too many teachers have no concept of "release of responsibility" (Fisher & Frey, 2021). Too many students (especially the above-average students) want the teacher to provide all the direction, as these students like direction and are good at following it, and it is easier for them to comply with teacher direction than to direct their own learning. Still others avoid learning altogether. Neither approach will serve our society well. What we need are learners who understand their current performance, recognize the gap between their current performance and the expected performance, and select strategies to close that gap. When schools are filled with students who have those characteristics, learning becomes not only visible but also palpable. In that case, as students become drivers of their learning and assume shared responsibility for their learning, learning is not limited to experiences inside the classroom.

What we need are learners who understand their current performance, recognize the gap between their current performance and the expected performance, and select strategies to close that gap.