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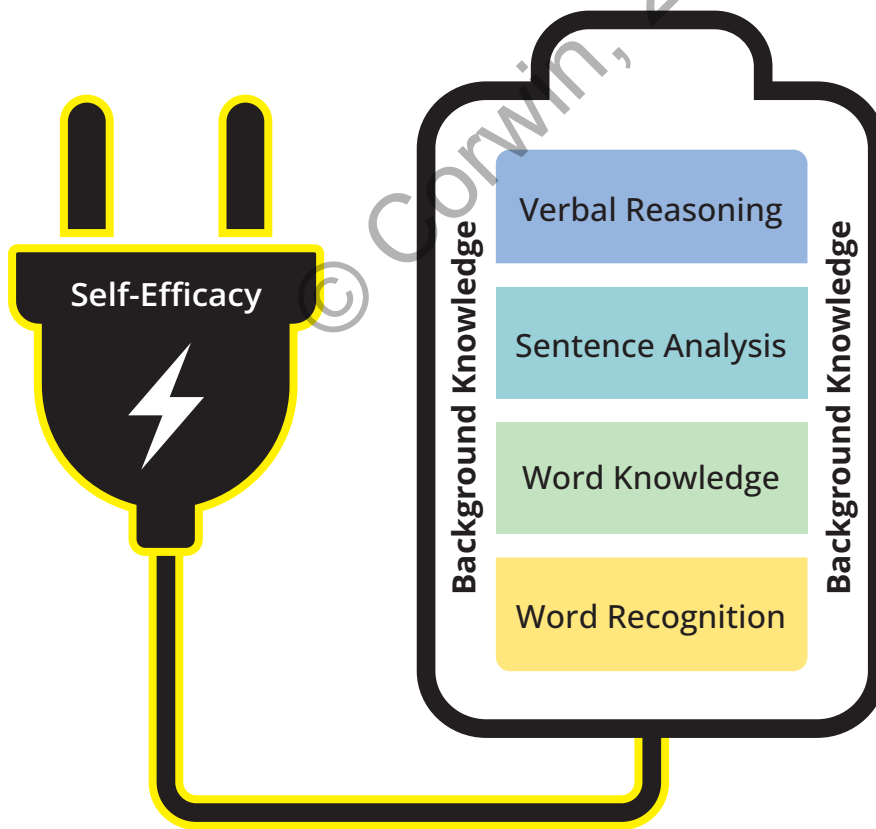
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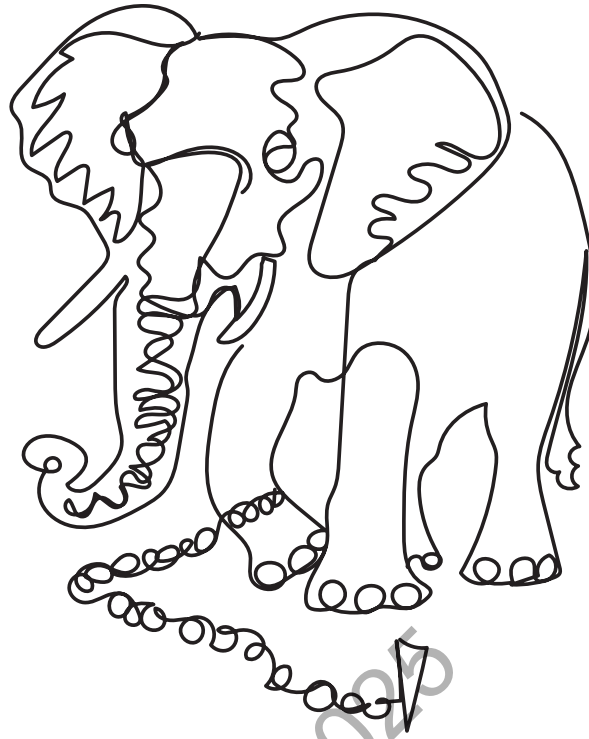
## CHAPTER 1

# Self-Efficacy

Foundational for Adolescent Success



In India, the traditional way of elephant training relies on using a rope to tie a baby elephant's leg to a stake in the ground. Initially, the baby elephant spends days pulling and kicking in a vain attempt to break free. Eventually, the baby elephant realizes the struggle is useless and gives up—to the point



that even when it is fully grown (five thousand to eleven thousand pounds), it no longer fights the rope, even when that rope is tied to a tree the elephant could easily snap. By that point, the elephant has been conditioned to believe that its effort will result in failure (Tracy, 1996). Thus, it doesn't even try.

This passive behavior has been termed *learned helplessness* in the psychology literature (Maier & Seligman, 1976).

As you have probably witnessed, it applies to some of our students as well. You have likely encountered students who put forth very little effort. Perhaps that is because they have developed learned helplessness and believe their efforts will be futile.



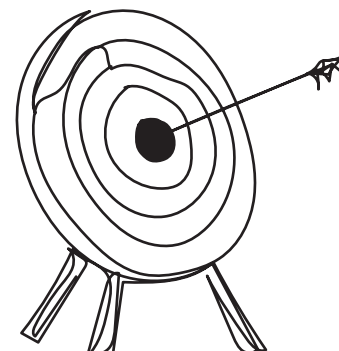
## Plug Into the Research

We don't want students to feel helpless and hopeless. In fact, academic help-seeking is associated with higher achievement (Fong et al., 2023). Self-efficacy—the belief that we have the wherewithal to accomplish

our goals—is crucial for learning and for self-regulation, including help-seeking (Bandura, 1977; Hole & Crozier, 2007). In general, people who have higher levels of self-efficacy experience more work satisfaction and less distress and anxiety about the tasks they must complete. For the classroom, our framework highlights how self-efficacy charges the components needed for secondary reading instruction. In fact, it is a crucial component for all learning processes (Cantor et al., 2019). Consequently, helping students

build self-efficacy is a critical aspect in fostering adolescent literacy (Alexander & Fox, 2011; Wolters et al., 2014).


There are several things educators must do to build students' self-efficacy. First, they need to help students set a learning goal. What does the student want to accomplish? Goal-setting is a critical aspect of building efficacy. Students who do not have goals have significantly reduced efficacy and actually accomplish less than those who do have goals, in part because they do not devote the required effort needed to meet specific intentions (He et al., 2023). Of course, the solution is not for educators to tell students what their goals should be; rather, teachers should support learners with goal-setting tasks. For students, ownership of the goal is as important as understanding why it is worthy of attention.



Second, efficacy requires students to believe they have what it takes to accomplish the goal. In essence, at times we all ask ourselves, “Do I have the skills, the will, and the resources to accomplish this goal?” In the classroom, the answers to these questions should also guide the support that teachers need to provide to students.

Here it's important to note that skills are different from resources, which is different from motivation. Providing a learning experience to someone who already has the skills but lacks motivation is not likely to have an impact. However, providing a learning experience to someone who needs skill-building can make a difference (Bassi et al., 2007). If we analyze what our students need to learn or to receive to be able to accomplish their goals—and then we ensure they develop or receive it—we're likely to increase their efficacy. Motivation as an instructional target is sometimes overlooked, at our own peril. In a reading intervention for middle school students, those who received instruction designed to promote motivation, along with foundational skills instruction, made significantly greater gains in word-reading speed, fluency, and comprehension, compared with students who received only the skills instruction (Lovett et al., 2021).

Third, it's essential to recognize that for learners, self-efficacy is stifled by the absence of success. When students experience success by accomplishing their goal or by making progress toward that goal, their efficacy grows. Unfortunately, too many students fail to recognize the many successes they have achieved. Thus, it is also worthwhile to help students identify and celebrate their accomplishments along the way.

For learners, **success leads to motivation and engagement**,  which we will discuss in the remainder of this chapter. For now, know that you can help students develop their sense of efficacy. The good news is that efficacy is situational, developing when it is nurtured (Hole & Crozier, 2007); it's not a personality trait or an inherent characteristic that only some people have. This means you can be that nurturer and increase your students' self-efficacy and, in doing so, elevate their motivation to learn.

Estimates show that motivation accounts for up to 30 percent of application and transfer of learning in adults and adolescents (Colquitt et al., 2000). However, despite its large potential to influence learning, motivation is not necessarily the cause of achievement but rather an outcome (Csikszentmihalyi, 1990). Further, it can be engineered into secondary instruction (Shernoff et al., 2003). Self-efficacy, attribution of success to effort (rather than ability), perceived value of the task, and emotions all contribute to whether students are willing to engage and what level of mental effort they're willing to exert (Clark & Saxberg, 2018). These psychological aspects are influenced by the complexity of tasks, past experiences of success and failure, interests, learning environment, and relationships.

When students experience academic success, they're more likely to engage in behaviors that led to that success (Weiner, 1985). A large study of challenge-seeking and growth mindset among nearly fifteen thousand adolescents in two countries found exactly that (Rege et al., 2021). There's something motivating about tackling a challenge, struggling a bit, and coming out a winner on the other side. When learners experience success, it feeds their motivation to continue, and they want to obtain that feeling again.



Conversely, there's something inherently unmotivating about repeated failure when learners don't get the incremental wins for which they strive. When students experience academic failure and attribute that failure to their own internal abilities, it initiates a vicious cycle of underachievement (Kirschner & Hendrick, 2020). Learners with poor reading ability don't enjoy it, so they read less. When they read less, they don't get better at reading because they are not engaged in sufficient practice for the instruction to stick. In the meantime, more-proficient classmates make further gains in part because of their higher reading volume. This phenomenon has

been termed the Matthew effect, echoing the biblical story that "the rich get richer while the poor get poorer" (Stanovich, 1986). Consequently, negative emotions—including guilt, shame, and anxiety—as well as task-avoidant behaviors arise for these students, while their self-efficacy and motivation decrease. Then the cycle continues.

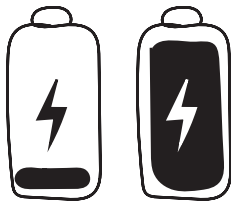
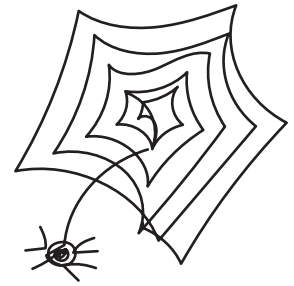
Studies of motivation suggest the one thing that influences motivation more than anything else is success. Students persist in activities where they experience success and avoid with passion those activities in which they're not successful or believe they cannot be (Pintrich, 2003).

To illustrate, let's look at the video game market. Players start a game at its most basic level. Maybe it takes a few tries, but then users achieve the level and move on to the next. Their sense of efficacy grows as they win, and they learn what moves to make next so they can win again. The players' self-efficacy fuels their motivation to continue engaging. Despite the

increased difficulty, the video game market has figured out how to balance the right amount of success and challenge to keep users coming back. Constant success is not the motivating factor; frequent incremental success balanced with failure is (Atkinson, 1957; Jeno et al., 2023).

In our classrooms, efficacy, motivation, and engagement must connect in an intricate web to encourage students to initiate, persist in, and exert mental effort in learning.

If learners in our classrooms do not experience success, it's unlikely that many will continue to engage with challenging tasks, particularly reading. It's not fun to fail; it's even less fun to consistently fail. As educators, **we need to create opportunities for students to experience quick wins to build their efficacy with learning.** Whether we're fostering word consciousness or building fluency, it's important to design lessons so all learners experience success. Ultimately, we want to create those lightbulb moments for students that provide mental snaps of satisfaction, which increase learner motivation.

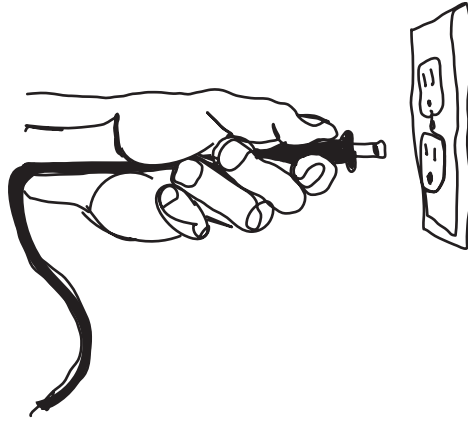


## Increase Your Battery Life

There is a lot to know about building student motivation and self-efficacy, but here are some important approaches to consider:

- **Help students become aware of their level of engagement and how it impacts their learning and the learning of others.** When you spend time helping students understand how their effort and engagement matter in learning, you encourage ownership in the classroom.
- **Design lessons with the Goldilocks principle in mind.** Lessons should be not too hard and not too easy—they should be “just right” so students can optimize failure and success (Hattie, 2023). Some lessons and students require scaffolds to access complex texts, and we will focus on various scaffolds in the chapters that follow.
- **Call attention to behaviors that lead to success so students attribute their success to their engagement and effort.** Name successful moves students make when they experience success, such as, “I noticed you intentionally made connections with your background knowledge to help you make sense of this text.”
- **Empathize with failure and task avoidance, but don't let disengagement become the norm.** It is easy to see how the negative views students hold about themselves could trigger apathy, social withdrawal, task avoidance, disengagement, or disruptive behavior. Combine caring with high expectations and confidence in their abilities—a teaching characteristic referred to as being a “warm demander” (Sandilos et al., 2017).





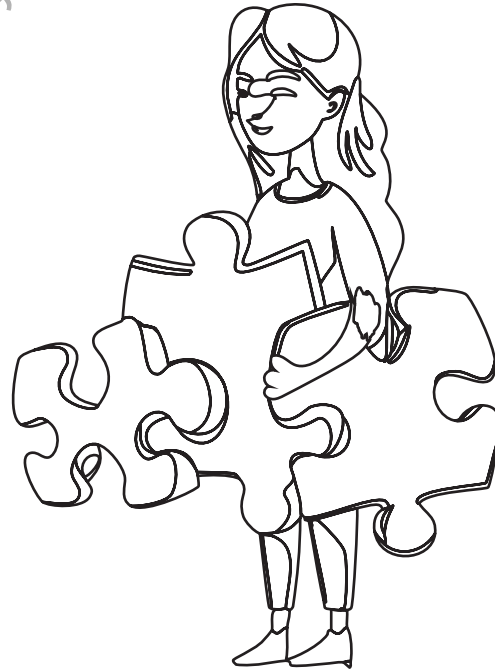
## Power Up Classroom Practice

Let's apply research on motivation and self-efficacy to instructional practices that support students' access to content. Here are the classroom practices we will explore:

- Teaching levels of engagement through the jigsaw protocol
- Understanding cognitive barriers to engagement and learning
- Understanding what students value as a means to increase motivation and efficacy
- Mental effort check-ins to monitor students' self-regulation

### Classroom Practice: Teaching Levels of Engagement Through the Jigsaw Protocol

We argue that self-regulation and engagement should be taught in the classroom as explicitly as word decoding, writing, or content knowledge is taught. Think about the planning and designing a science teacher engages in when developing a unit on the systems of the body. In a lesson about the digestive system and normal regulation of blood sugar, a science teacher has thought carefully about the visuals, examples, vocabulary, direct instruction, and collaborative work needed to support student understanding. Similar processes should occur when we are teaching learners about student engagement, which occurs along a continuum. As Table 1.1 shows, students can be actively engaged or actively disengaged.



Video 1.1  
Jigsaw  
[qrs.ly/eafya26](https://qrs.ly/eafya26)  
To read a QR code, you must have a smartphone or tablet with a camera. We recommend that you download a QR code reader app that is made specifically for your phone or tablet brand.

**Table 1.1 • Continuum of Engagement**

ACTIVE		PASSIVE		ACTIVE	
<b>Disrupting</b>	<b>Avoiding</b>	<b>Withdrawing</b>	<b>Participating</b>	<b>Investing</b>	<b>Driving</b>
<ul style="list-style-type: none"> <li>• stopping learning</li> <li>• distracting others</li> <li>• making loud or quiet interruptions</li> </ul>	<ul style="list-style-type: none"> <li>• avoiding learning</li> <li>• not being physically present</li> <li>• looking for ways to get out of the work</li> </ul>	<ul style="list-style-type: none"> <li>• mentally separating from the work</li> <li>• daydreaming</li> <li>• not working with the group</li> </ul>	<ul style="list-style-type: none"> <li>• turning in assignments</li> <li>• answering questions</li> <li>• following directions</li> </ul>	<ul style="list-style-type: none"> <li>• asking questions</li> <li>• feeling like the learning is important</li> <li>• thinking of how the learning connects to other ideas</li> </ul>	<ul style="list-style-type: none"> <li>• setting goals</li> <li>• seeking feedback</li> <li>• making self-assessments</li> </ul>
<b>Disengagement</b>			<b>Engagement</b>		

Source: Adapted from Berry, A. (2022).

Have you ever procrastinated completing a difficult task? Or has your mind ever wandered during a professional learning session? As educators, we need to help students understand that we have all experienced different levels of engagement depending on various factors—and that it’s important to be aware of our engagement level. One way to address this in the classroom is through the use of the jigsaw reading technique, a collaborative protocol designed to empower students to serve as experts in a specific dimension of a topic and to prompt them to rely on each other for a more complete understanding of the topic.

Several research studies on the jigsaw reading technique from around the world have reported its positive impact on reading comprehension (Baneng, 2020; Hattie, 2023; Hidayati & Rohayati, 2017; Namaziandost et al., 2020). In this technique, students work with classmates as part of an “expert group.” With this group, they work to specialize in their topic in preparation for teaching their fellow students from their “home group.” Within their home groups, students depend on the other members to give them insights into the other dimensions of the topic they didn’t study. This strategic approach proves beneficial throughout the school year as students are acquiring, consolidating, and working for deeper understanding of various topics. The resulting interdependence not only supports content knowledge acquisition and communication skills but also fosters collective efficacy as students engage in shared learning experiences.

The following instructions show how teachers can use the jigsaw reading technique to help learners understand the different levels of student engagement.



*Steps for implementation*

1. **Assign home groups.** The teacher forms home groups of four to six students.
2. **Divide expert group subcategories.** The teacher assigns each student in the home group to become an expert in one of the following engagement categories: disrupting, avoiding, withdrawing, participating, investing, and driving.
3. **Allow students to become the experts.** Students meet with their expert groups (the other students assigned the same category) to read and analyze the text related to their assigned engagement level. Table 1.2 shows sample texts students could analyze. They discuss and agree on two to four key points that describe their assigned engagement level. They also discuss examples they will share back with their home groups to make the category more visible and comprehensible. Based on teacher preference and time available, there are several aids students could use to convey information, such as posters, digital presentations, skits, or other methods.
4. **Ask students to teach and learn.** Students meet with their home groups and take turns teaching their category they prepared for. Learners use a graphic organizer, like the one in Table 1.3, to take notes and process the information from each group.
5. **Encourage reflection.** After the teaching sessions, students reconvene with their expert groups and debrief the jigsaw process and consider additional insights after their teaching experience. Sample reflection questions include the following:
  - How well do you think you were able to communicate the key points about your assigned engagement category?
  - What went well during your presentation, and what would you do differently?
  - Were there any confusions or misconceptions? How did you help others understand the information?



**Table 1.2 • Six Text Selections for the Jigsaw Protocol for Each Level of Engagement**

### Disrupting

Imagine this: You're in class, trying to focus on the lesson, but there are some classmates who are not really tuned into the lesson. They're doing things that show they are not into the learning of that day—maybe even cracking jokes, being a bit too loud, or doing things that distract everyone.

Disruptions don't just occur when someone is intentionally trying to disrupt learning. A disruption happens any time the flow of learning gets interrupted. For example, maybe you are following along with the math strategy the teacher is introducing and suddenly there is an announcement over the loudspeaker. That counts as a disruption because there is a temporary stoppage of learning. And it takes a while to get back into the groove of learning.

Quiet disruptions exist too. Imagine you are getting some feedback from a peer on your essay and someone innocently walks up and asks for a pencil. No harm is intended, but again, it takes a moment to refocus your brain.

So, disruptions can be noisy or subtle, intentional or unintentional. But all disruptions mean a temporary halt in the learning for both the disrupter and those being disrupted. You can think of a disruption like a small pebble thrown into a pond. The pebble can cause a ripple effect that impacts the tranquility of the water. It takes a while for that water to settle back to how it was.

### Avoiding

Have you found yourself leaving class for a restroom break to avoid doing some work? Some students occupy themselves with tasks like unnecessary restroom breaks, organizing their materials, checking social media, or waiting for help. Often these actions signal that the student is trying to avoid learning.

Avoiding can be a result of big emotions or challenges. When learning feels overwhelming or confusing, students might avoid the work because the challenge feels uncomfortable. Sometimes a person might even avoid a hard task by working on an easier task. Sometimes it is helpful to get a smaller task accomplished before tackling the harder task, but it is important to recognize when you deliberately avoid a particular task so you can make the decision to refocus or to ask for help. What do you think the difference is between taking a break and avoiding work?

The most extreme form of avoiding learning is when students don't show up to class at all. This is a significant problem in education right now. There are many reasons a student might be absent, but we need to figure out why some students decide not to come to school. We should pay attention to how students feel and to the atmosphere in the classroom. It's important for students and schools to recognize when students are avoiding learning and figure out how to change that behavior.



### Withdrawing

Think about it: Our brains can't stay focused on learning new information every second of the day. When we are learning, it is totally natural for our minds to drift off to other thoughts and ideas. What do you think about when you daydream or explore other thoughts in your mind?

Although it is natural for our brains to wander from the learning in front of us, being withdrawn involves a little more than getting wrapped up in a momentary thought. We can withdraw in two ways: physically or mentally. Physically withdrawing might look like sinking into your seat during your group's collaboration time or physically stepping away from the learning happening in front of you. The good news is you are not stopping anyone from learning. But you are missing out on the learning. And your group is missing out on the valuable contributions you make.

Mentally withdrawing means that you are not connecting to the learning. You are not physically leaving, but you are not really engaged with what's happening around you either. If you check out for too long, it can get really challenging to dive back into the learning.

It's important to think of the reasons that you are withdrawing from the learning. Confronting the reasons can help you stay focused. Remember, reaching out for help to talk things through with someone can make a big difference. Don't let the learning pass you by. Instead, find strategies to reorient yourself with the learning that's happening.

### Participating

If you are doing your work in class, paying attention, and even answering the teacher's questions, how engaged do you think you are? How would you rate your level of engagement? Do those actions make you a stellar student? Would the teacher expect more from you, or are you doing enough?

Let's explore the participation level of engagement. Let's understand what participation is and what it is not. In addition to paying attention and doing the work, participation also means you are coming to school and passing your classes. At this level of engagement, you have started to be engaged in your learning. But notice the key word: *started*. That's because participation falls under the idea of passive learning. Participation is passive learning because while you are following the classroom or school's directions, you are not in control of your learning journey. Think about it like you are in the passenger seat of a car—you are along for the ride, but you are not in the driver's seat.

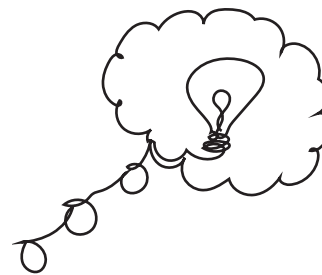
Should participation be rewarded and seen as the ultimate goal of school?



### Investing

Picture this: In math class you are learning about percentages and ratios. You think to yourself, “*When am I ever going to use this in real life?*” Then you land your first job and see that percentages and ratios are everywhere. Your uncle even shares some wisdom with you. He says to save at least 15 percent of your earnings. Suddenly, math isn’t just numbers on a page. It applies to real life. Even the math that isn’t seen in everyday life is helpful because it helps you develop other skills, like critical thinking. That is what it means to invest in your learning—feeling that it matters. It’s important.

Investing in your learning also means that you are not just listening to the teacher but that you ask questions. You ask questions to clarify information, to learn more about a topic, or to check your own understanding. So, when your horticulture teacher is discussing the techniques of grafting plants and you are understanding the process but are not sure why someone would want to do this, you ask. You raise your hand and ask, “What are the benefits of grafting plants?” That is being invested in your learning. Asking questions is a key part of being successful in school and in life.



### Driving

Driving your learning is not just about completing tasks and paying attention; it’s about being in the driver’s seat of your learning journey. Students who drive their learning go beyond the basics.

Students who drive their learning set personal goals aligned with what the class aims to achieve. First, you have to know what the learning goal is for the lesson. Then you can set a goal, such as this one: “Today I am going to ask questions to help me understand the purpose of the figurative language. I’m going to ask people to explain to me how they were able to figure out the meaning of figurative language. Also, I want to add more evidence to my informative essay.”

Students who drive their learning set goals, but they also seek feedback so they can get closer to those goals. A student might say, “Can you give me feedback on whether my evidence aligns with my claim?”

And it doesn’t end there. Students at this level do not wait for a grade to let them know how they are doing in their classes. They self-assess. They use the criteria or rubrics for the class to monitor their own progress.

Students who are at the driving level of engagement recognize that receiving an education means something. They also seize opportunities to teach others. They want to teach others for two reasons. One is that they enjoy helping their classmates, because learning is supposed to be hard, and we all need help in different areas. But also, they want to teach others, because they recognize that teaching others helps them solidify their own understanding.

**Table 1.3** • Expert Group Graphic Organizer for the Engagement Jigsaw

EXPERT GROUP NOTES FOR LEVELS OF ENGAGEMENT			
SUBTOPICS	DESCRIPTION	EXAMPLES	Potential Reasons or Causes for Being on This Level
Disrupting			
Avoiding			
Withdrawing			
Participating			
Investing			
Driving			

### Personal Reflection

1. In this classroom, what do you think your typical level of engagement is?

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2. Why do you think that is? \_\_\_\_\_

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3. What would you have to do to move one level up from your typical level?

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This resource is available for download at <https://companion.corwin.com/courses/TeachingFoundationalSkills>.

Notice the personal reflection questions provided in the final step of the jigsaw protocol and located at the bottom of Table 1.3. Students need to reflect on how the recent learning applies to them personally, self-assess their level of engagement, understand why it may vary, and determine how to progress along the continuum of engagement to levels that are more conducive to reaching their goals. Prompt students to check in with their levels frequently. Once you know the amount of effort students put into learning, you can tailor the material or psychosocial interventions to help them with content or to build their confidence accordingly.



### Classroom Practice: Understanding Cognitive Barriers Survey

Often educators find that students who enter middle school or high school and struggle academically have difficulty expressing why they have had varied success with school. Sometimes students may be hesitant to express their concerns. In addressing this issue, we draw upon the work of Stephen Chew and William

Cerbin (2021), who conducted a systematic review of the existing research literature on student disengagement and identified nine cognitive barriers to learning. They describe a cognitive barrier as “a characteristic or aspect of mental processing that can affect the success or failure of learning” (p. 3). Utilizing their insights, teachers can facilitate conversations with students by presenting a series of statements designed to help them articulate their feelings and experiences. Table 1.4 provides a list of the cognitive barriers to learning.

Table 1.5 provides a list of statements you can share with your students to help them identify the specific cognitive barrier they might be facing. This tool also helps teachers identify the reasons for learning challenges and disengagement, which will then allow you to take action to invite your students back into learning.

*definition*



Video 1.2  
Cognitive Barrier  
Survey Interview  
[qrs.ly/rffya3s](https://qrs.ly/rffya3s)

**Table 1.4 • Cognitive Barriers to Learning**

CHALLENGE	DESCRIPTION
1. Student mental mindset	<ul style="list-style-type: none"> <li>• Students hold attitudes and beliefs about a course or topic, such as how interesting or valuable it will be and how capable they are to master it through their own efforts.</li> <li>• Students may believe that a course is irrelevant to them or that they lack the ability needed to learn the content.</li> </ul>
2. Metacognition and self-regulation	<ul style="list-style-type: none"> <li>• Students monitor and judge their level of understanding of concepts, and they regulate their learning behaviors to achieve a desired level of mastery.</li> <li>• Students may be overconfident in their level of understanding.</li> </ul>
3. Student fear and mistrust	<ul style="list-style-type: none"> <li>• Students come to a course with a certain level of fear of taking it. Students may interpret the teacher's behavior as being unfair or unsupportive of their learning, resulting in a certain degree of mistrust.</li> <li>• Negative emotional reactions, such as fear or lack of trust in the teacher, can undermine motivation and interfere with learning.</li> </ul>
4. Insufficient prior knowledge	<ul style="list-style-type: none"> <li>• Students vary in how much they know about course content at the start of the course.</li> <li>• Some students may have little to no knowledge about the content, putting them at a disadvantage compared to students with a strong background.</li> </ul>
5. Misconceptions	<ul style="list-style-type: none"> <li>• Students often hold faulty or mistaken beliefs about the course content at the start of the course.</li> <li>• Students may cling to misconceptions even when taught accurate information.</li> </ul>
6. Ineffective learning strategies	<ul style="list-style-type: none"> <li>• Students can employ various methods to learn course concepts, and these methods vary widely in effectiveness and efficiency.</li> <li>• Students often prefer the least effective learning strategies.</li> </ul>
7. Transfer of learning	<ul style="list-style-type: none"> <li>• Students can vary in their ability and propensity to apply course concepts appropriately outside the classroom context.</li> <li>• Students often fail to apply knowledge beyond the end of a course.</li> </ul>
8. Constraints of selective attention	<ul style="list-style-type: none"> <li>• Students can focus their awareness on only a limited portion of the environment, missing anything outside that focus.</li> <li>• Learners mistakenly believe they can multitask, switching attention back and forth among different tasks.</li> </ul>
9. Constraints of mental effort and working memory	<ul style="list-style-type: none"> <li>• Students have two major limitations in cognitive processing: the amount of mental effort or concentration available to them and the ability to hold information consciously.</li> <li>• Students are easily overwhelmed by trying to concentrate on too complex a task or to remember too much information.</li> </ul>

Source: Adapted from Chew, S. L., & Cerbin, W. J. (2020).

**Table 1.5** • Student Interview to Identify Specific Barriers to Engagement

	<b>“Here are some statements that students think about. I’m going to read you a sentence and you tell me if you think that way often, sometimes, or rarely.”</b>	<b>OFTEN</b>	<b>SOMETIMES</b>	<b>RARELY</b>
1.	I wonder, “Why do I need to learn this?”			
2.	I don’t know how to do the work.			
3.	I’m not really good at school.			
4.	I already know how to do the work; I don’t really need to pay attention.			
5.	It’s hard to focus in class because I don’t feel comfortable asking questions when I’m confused.			
6.	I’m trying, but I don’t understand the work.			
7.	I study, but I still don’t do well on the tests.			
8.	I think I’ve learned something, but then I can’t do the work on my own.			
9.	I have a hard time paying attention.			
10.	There is a lot of information to remember, and it’s hard to remember so many things.			
11.	I use my phone during class, but I think I can still do my work at the same time.			
12.	When I’m doing my work, I get confused or lost.			
13.	I don’t think my teachers really like me.			
14.	I notice that my understanding of a topic is different from the information being presented in class.			





Table 1.6 aligns the survey questions to Chew and Cerbin’s nine cognitive barriers to learning (2020), and it provides approaches for how you can address each one.

**Table 1.6 • Survey Statements Aligned With Cognitive Barriers**

COGNITIVE BARRIER DESCRIPTION	QUESTION FROM SURVEY	POTENTIAL APPROACHES
1. Student mental mindset	Question 1, Question 3	Explain the value and importance of the learning, increase students’ ownership of their learning, and explore the habits of minds and mindsets.
2. Metacognition and self-regulation (they may be overconfident about their knowledge or skills and therefore they don’t devote attention to it)	Question 4	Create reflection assignments; teach students about planning, monitoring, and adjusting their learning; and use practice tests.
3. Student fear and mistrust	Question 5, Question 13	Focus on teacher credibility, restructure feedback, and create a safe climate for learning and making mistakes.
4. Insufficient prior knowledge	Question 2, Question 6	Use initial assessments, provide the lesson’s background knowledge and key vocabulary in advance, and use interactive videos.
5. Misconceptions	Question 14	Use advance organizers, recognize common misconceptions for students at a specific age or in a specific content area, and invite students to justify their responses to that thinking.
6. Ineffective learning strategies	Question 7	Teach study skills, model effective strategies with think-alouds, and use spaced practice.
7. Transfer of learning	Question 8, Question 12	Plan appropriate tasks, model application in different contexts, and tailor feedback to include processing of the task.
8. Constraints of selective attention	Question 9, Question 11	Increase teacher clarity, use breaks and reorientation strategies, and teach students to avoid multitasking, especially with media.
9. Constraints of mental effort and working memory	Question 10, Question 12	Organize information and chunk it, use both visual and auditory cues (dual coding), and use retrieval practice.

## Classroom Practice: Understanding What Students Value

As teachers aiming to foster the self-efficacy of adolescents, we must acknowledge and support our students' identity and sense of belonging. Belonging isn't just about students fitting into an established organization; it also involves understanding that the organization is continually shaped and reshaped by the students who enter the building. This process can't be left to chance; rather, we need to purposefully cultivate classroom experiences and interactions that affirm our students' personal and academic identities.

A good start is to understand the values of each of our students—values that have been shaped through their culture, family, and personal experiences. However, some students may find it challenging to spontaneously share their core values. So, a practical activity involves providing students with a list of potential values they can consider, such as the list in Table 1.7.

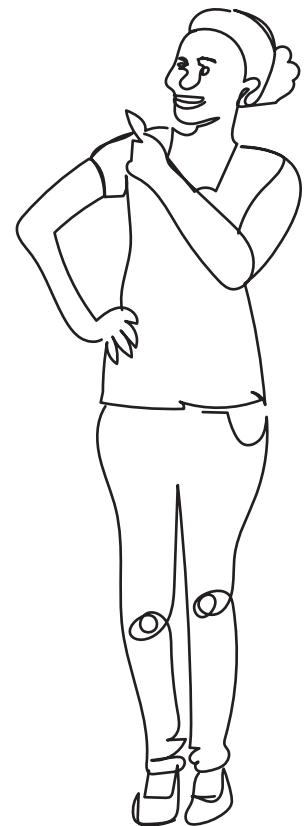
**Table 1.7 • Values**

honesty	loyalty	optimism	courage	generosity
success	empathy	kindness	independence	teamwork
knowledge	boldness	spirituality	patience	patriotism
confidence	making a difference	being the best	justice	persistence
fame	power	cleanliness	problem-solving	risk-taking
creativity	humor	harmony	friendships	community
leadership	learning	faith	health consciousness	equity

When we understand a student's values, we can leverage those values to promote stronger social, emotional, and academic identities. Once our students have reflected on the values most important to them, we can choose from many extension activities to help them deepen their thinking around their values. For example, teachers can use the following questions as part of class discussions, independent writing activities, or identity presentations:

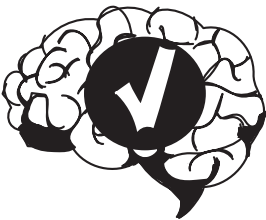


Video 1.3  
Value Activity  
[qrs.ly/jffya40](https://qrs.ly/jffya40)



- Which values are most important to you?
- Where do your values come from?
- What do your friends, classmates, and loved ones consider to be a value you embody?
- What values are important to you in your friends?
- Can you provide specific examples from your life where your actions aligned with the values you've identified as important to you?
- Can you provide specific examples from your life where your actions did not align with the values you've identified as important to you?
- Why would it be helpful to understand someone else's core values?
- Why would it be helpful for other people to understand your values?
- How can embracing your core values help you positively impact the way you interact with others?
- What is one thing you would need to change to live out your values?
- How does knowing your values help you live a more authentic life?

These questions can help learners articulate their values more thoughtfully when they are communicating their identity with their teachers and peers. Then, by leveraging the students' core values, we can promote stronger social, emotional, and academic identities. This approach creates a more inclusive learning experience, which sets the stage for a meaningful education.



### Classroom Practice: Mental Effort Check-In

Middle and high school students are learning to strengthen their self-regulation skills, which is their ability to manage their own actions. The amount of mental effort it takes learners to complete a task or achieve a goal is one measure of their self-regulation (Van Gog et al., 2012). Prompting our students to help them develop an awareness about the role of their mental effort (Dweck, 2007) is key to helping them interrupt a negative fixed mindset (e.g., “I’m not smart enough to understand this reading”) and transform it into a growth mindset (e.g., “This reading is challenging but I can persist”). Consider asking students the question shown in Figure 1.1 to check in with their effort after they read a challenging text.

**Figure 1.1** • A Measure of Mental Effort

How much effort did you invest to complete the reading task?				
1 No effort	2	3 Moderate effort	4	5 Extreme effort

Source: Adapted from Van Gog et al. (2012).

Asking students to assess how much effort they applied to complete a particular task can be telling. Students who succeed with low effort are unchallenged; students who succeed with high effort attribute success to effort. Students who do poorly on an assignment and exert no effort versus extreme effort might need a different course of action. Students with low effort may have a low efficacy and need some psychosocial support to engage; students with high effort may need a reteach or an intervention.

## Voices From the Field

A group of ninth-grade students took a class inventory involving ten questions about their learning, habits, future plans, perceptions, strengths, and weaknesses. Consider the student responses shown in Table 1.8.

**Table 1.8** • Responses to a Class Inventory

WHAT I WANT MY TEACHER TO KNOW ABOUT ME	MY AREAS OF WEAKNESS IN ENGLISH CLASS
I don't get it the first time.	Everything
I need stuff step by step and I learn slow.	Reading i be stuttering when i read i be nervous
I actually am trying just reading is difficult for me.	Don't finish reading on time.
I hate reading out loud in front of other students.	I struggle to understand things and I struggle with pronouncing words and spelling.
I am a slow learner so it might take me a little bit to get stuff figured out.	Reading out loud/spelling
I may need a little extra help.	Comprehension skills
I am going to need more examples to learn.	My weakness in English is reading.
I give up fast but just need a push.	Reading comprehension and writing
I get stressed and mad when I don't understand things.	This is my worse subject. Im not good in this class.
I like to speak in private so I can understand better.	Remembering what I read right after I read it or when im reading im not actually reading something is going thru my head
I am not very good at English.	Reading out loud/spelling
I try my hardest.	I get anxiety when I have to read out loud.
I didn't go to 6th grade so I might be behind.	Reading aloud

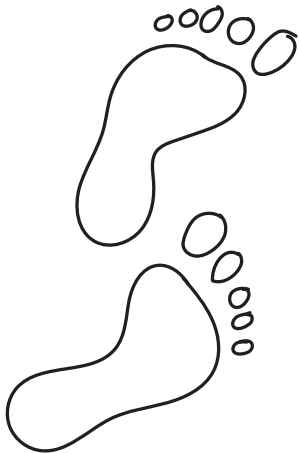
Do these students seem like kids who don't care about school? Do they seem like they are unmotivated or unwilling to learn? No. How many of your students would identify with these statements? By the time students reach middle and high school, many have developed negative identities about themselves as learners: slow learner, poor reader, struggling student. Notice the number of students who think learning is supposed to be easy, who think needing help or extra time is a mark of shame, or who believe that struggle is a sign of weakness.

Struggle is situational; it's not an identifier or a label we should cast on students. Our role is to foster positive academic identities where students see themselves as mathematicians, historians, authors, analysts, entrepreneurs, and scientists. But how do we help shape these identities when students don't yet see themselves as belonging in the world of academics?

These same students who self-reported weakness in reading, writing, vocabulary, and learning also responded to another statement: "I want to earn my high school diploma so/because . . ." Their responses appear in Table 1.9.

**Table 1.9** • Responses About Earning a Diploma

I WANT TO EARN MY HIGH SCHOOL DIPLOMA SO/BECAUSE . . .	
I want to go to college and be a sportscaster.	I want to be successful when I grow up.
If you don't have one people think you're dumb.	I want to have a good job, and it can help me go to college.
I want to get a good job and have a good life.	I can get a good job and be able to do something I want to do.
I want to be a travel nurse.	I want to be successful and go to college.
It's important because it opens up jobs and college.	I want to make my mom proud. I want to make my family proud.
I want to go to college and do something with my future.	I want to go to music school.



Did you hear it? Despite their self-proclaimed difficulty in learning, they still have big dreams for themselves. A 2018 study by The New Teacher Project (TNPT) had similar findings: Ninety-four percent of students surveyed in diverse urban, rural, and charter districts aspired to attend college, and 70 percent of high school students in the survey had career

goals that required at least a college degree. Our goal as educators is to help students meet and exceed the goals and potential they have for themselves. Once we understand how they view themselves, we can be the catalyst that accelerates their journey.



## Take Charge: Conclusion and Reflective Questions

Educators can consider the psychological aspects of efficacy, motivation, and engagement in the context of student learning. Little, satisfying wins—like the ones players experience in video games—can energize students to search out more of those wins. The Goldilocks principle suggests that designing lessons with the right amount of challenge can optimize the learning experience by providing students with the energy that comes with succeeding on a challenge.

We recognize that cognitive barriers to learning can hinder academic progress, but understanding and then addressing our students' specific barriers can help learners feel valued and supported in achieving goals.

Choose one of these questions to reflect on your practice and take charge to support learning for all students:

- Think about the experiences of students who have struggled to connect with school. How can you show students that their unique identities and values are integral to their classroom community?

- Consider the depth in which you plan and design content lessons. How can you explicitly teach students about their level of engagement with the same intentionality?
- Reflect on the importance of shaping positive academic identities for students. In what ways can you encourage a classroom culture that views struggle as situational rather than as a permanent identifier?
- Consider the importance of quick wins in fostering motivation. Think of an upcoming learning experience you've planned. How can you design for quick wins so all students experience academic success?

