

2 DISPOSITIONS TOWARD LEARNING

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OVERVIEW

Many of us have something we want to learn to do that is beyond what we are currently able to do.¹ While there are a number of key factors that can influence our success (or contribute to our failure), one of the most important is our own orientation toward learning. In this chapter, you will explore the role that an individual's dispositions towards learning can play, and will discover some ways individuals can work to change dispositions that aren't serving them well.

INTRODUCTION

Recently, as in the past 36 hours, I've decided to quit my job and become a famous YouTuber. Based on my research, I will only need 2 million views a month to sustain my aspirational lifestyle.

Do I know anything about filming, video editing, sound engineering, and graphic design? No. Do I own any professional recording equipment, other than the camera and mic built into my aging cell phone that can't hold a battery charge for more than 3 hours? Also no.

Seems totally doable, right?

I start with this story because most of us have, or will have, ideas for things we want to learn to do that are beyond what we are currently able to do. Sometimes those things are hobbies, like learning to crochet adorable sweaters for penguins recovering from oil spills in Australia. Other times those might be goals related to health and wellness, like learning to run a half marathon or to cook healthy food using only a mug and a microwave.

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And, since y'all are reading this (sorry- we say y'all in the South), my guess is you are in school, presumably to learn new things. Ok, yes, and get a degree, a job that pays as much money as being a famous YouTuber, etc. etc. All those things.

There are numerous, complex factors that can either facilitate learning, or can get in the way of learning (Roozen and Erickson). The physical environment someone is trying to learn in, for example, can make learning easier or more challenging. At some point, you probably have tried to learn in a less than ideal environment: a noisy house, or a classroom in Florida when the AC is broken. If you are learning from some sort of instructor or coach, then the way that person teaches can impact learning; similarly, if you are doing some sort of practice to learn, like baseball batting drills, then the way those practice sessions are designed can also help or hinder. Having the resources needed to learn is another important factor because, in my example above, if you are learning to play baseball but do not have a baseball bat, it is going to be more difficult than if you did have a bat.

Then, of course, there is the role of the learner themselves. Again, the factors that can impact a learner's ability to learn are numerous, and the scope of this chapter doesn't allow me to get into all of them. *How People Learn* and *How People Learn II* are great starting points for those interested in reading more. But, what I would like to talk about, and what chapter space permits, is the ways in which a learner's *beliefs about learning and about themselves as learners* can orient them towards learning, or can inhibit their learning. Recent research from the fields of education, educational psychology, and writing studies have named these beliefs "dispositions" (Costa and Kallick; Driscoll and Wells; Ennis; Nelsen). You probably are already thinking, well duh! Of course dispositions toward learning impacts learning! And that's great, because my goal is for you to be able to name and identify your own dispositions toward learning, generally, and in your writing classes, specifically, so that you can reflect on whether or not those dispositions are serving you in that particular context, and if not, you can work to change them.

DISPOSITIONS, DEFINED

But I am getting ahead of myself. First, let's get a handle on what dispositions are. Merriam-Webster's dictionary defines dispositions as, "**a**: prevailing tendency, mood, or inclination; **b**: temperamental makeup; **c**: the tendency of something to act in a certain manner under given circumstances." Using this definition, dispositions towards learning would be the

tendency, mood, or inclination of the learner to learn; the temperamental makeup of the learner towards learning; and the tendency of the learner to act in a certain manner under given circumstances; i.e., in a learning situation, the learner has a tendency to act in a way that supports their learning. Baird and Dilger describe dispositions as, “individual attitudes that influence the motivation of intellectual traits.” Claxton and Kallick note that, “The word itself indicates that it’s not only a person’s ability that counts, but also the person’s perception and inclination to make good use of that ability in appropriate situations” (63).

Writing studies scholars Driscoll and Wells offer an expanded definition of dispositions by breaking down some of their features. They: Are a critical part of a larger system that includes the person, the context, the process through which learning happens, and time.

1. Are not intellectual traits like knowledge, skills, or aptitude, but rather determine how those intellectual traits are used or applied.
2. Determine students’ sensitivity toward and willingness to engage in transfer.
3. Can positively or negatively impact the learning environment; they can be generative or disruptive.
4. Are dynamic and may be context-specific or broadly generalized.

Let’s unpack this: as I described at the beginning of this chapter, there are a host of factors that influence learning, and dispositions are one of them. Yet, dispositions aren’t the same as that knowledge. While you almost always arrive at new learning situations with previous knowledge, including “declarative knowledge” (also called content knowledge) which is knowing *that* (e.g., knowing that a topic sentence is the first one in a paragraph); “procedural knowledge,” which is knowing *how* (e.g., knowing how to revise a topic sentence to fit the paragraph), when faced with a new learning challenge, your dispositions will impact the extent to which you draw from what you already know and are able to use it in that new setting (this is called *knowledge transfer*, and it is super important. You can read *Writing Spaces*, Vol. 4, “The Importance of Transfer in Your First Year Writing Course” by Kara Taczak, for more on transfer. Just as not all beliefs are positive, not all dispositions are positive, either, and some can really get in the way of your learning. Lastly, your dispositions are not static—they will change, sometimes from moment to moment, but certainly from one situation to another. For example, the way your dispositions im-

pect your learning in a writing class may be different from how your dispositions impact your learning in a different subject.

You may have noticed I've been using the term dispositions, plural, so now let's go even deeper into some of the specific dispositions researchers have identified. From educational psychology, we have *expectancy-value*, *self-efficacy*, *self-regulation*, and *attribution*. From writing studies, we have *problem-exploring* and *answer-getting*. I have chosen to focus on these as they are the dispositions I regularly see impacting me in my own learning (including my aspirations to become a YouTube vlogger), but also in the learning that my students are doing in the writing courses I teach.

TYPES OF DISPOSITIONS

EXPECTANCY-VALUE

Expectancy-value theory (Eccles; Eccles and Wigfield; Wigfield and Eccles) explains that learners will perform better, persist longer, and make better choices when they feel that what they are working on, or learning, is valuable to them. I am sure each of you can easily think of a time when you were really interested in learning a new skill, hobby, or subject, because learning it was valuable to you. In contrast, you can also probably think of times when you didn't see the point of learning what you were being asked to learn, and therefore were probably less motivated to learn it. I am extremely motivated to watch YouTube videos in order to learn how to effectively film for my vlog. While I am not serious about getting YouTube famous and quitting my job, I do think it has the potential to be a side hustle (a time-consuming side hustle), so I am motivated to start learning what I need to learn. When it comes to my writing classes, if a student doesn't place much value on writing, if they don't think the course or skill will be useful to them in the future, they may find little about my course to be intrinsically motivating. Me shrieking, "WRITING IS IMPORTANT" is not going to convince anyone, so the best I can do is design assignments that allow them to explore the role of writing in whatever they want to study in college, or in the job they want to do after college. Like my students, if you connect developing as a writer to goals that are personally meaningful to you—if you expect the knowledge you are learning now will be valuable to you in the future—you are more likely to be motivated to learn. If you are unsure of the role writing may play for you in the future, I recommend you investigate possible career choices and explore how writing is used in those areas. More often than not, you will

find that writing plays a larger role in your possible future than you may have anticipated.

SELF-EFFICACY

Self-efficacy is defined as “people’s beliefs about their capabilities to produce performances that influence events affecting their lives” (Bandura 434). Several years ago, I decided to sign up for a Star-Wars themed half-marathon. Though I was not a runner, and in fact do not like running, I knew that I was capable of training to complete a half-marathon. I had self-efficacy toward Star Wars half-marathon success. Since I believed I was capable of running the half-marathon, I was more likely to do the things required to complete the race (like maintaining a training schedule), than if I believed that no matter what I did I wouldn’t be able to cross the finish line.

With regards to learners, self-efficacy can be defined as learners’ beliefs about their capabilities to do the things or produce the things needed to influence events affecting their lives. A student with self-efficacy will believe they can take the steps needed to succeed in a class, like visiting their professor’s office hours to talk through an upcoming assignment. Side note: students, please go to your professor’s office hours! We are sad and lonely when no one comes.

SELF-REGULATION

Self-regulation, according to Zimmerman, is not an inherent trait that learners either have or don’t have, but rather it is a process learners go through when they choose how they will adapt to new learning situations. The ability to set reasonable goals, to choose to utilize strategies to achieve those goals, to self-evaluate progress, to manage the physical and social settings so that they serve to support and not distract from those goals, to practice effective time management, to reflect on the success of choices made or strategies used, to understand how performance leads to results, and to be able to make changes to any of these preceding actions to improve future performance—all of this falls under the umbrella of self-regulation. If it sounds like a lot, it is, and it makes sense when Zimmerman comments, “It is hardly surprising that many students have not learned to self-regulate their academic studying very well” (64). I would argue it isn’t only students who haven’t mastered self-regulation because there are plenty of times when the goals I set for myself are unreasonable and, as someone with ADHD, I certainly struggle with time management.

Self-regulation is linked to self-efficacy. Bandura found students with high self-efficacy were more likely than students with low-self efficacy to self-regulate their own learning. Self-regulation is the ability to make a choice for yourself and act on it, so students with strong self-regulation will decide they should visit their professor's office hours, and then actually follow through and do it. Students without strong self-regulation might have the idea of visiting office hours but then not act on it. Zimmerman found that students with self-efficacy were more persistent when faced with obstacles, and felt less anxious about the work they need to do. They also set more challenging goals for themselves, since they had the confidence in their own abilities to meet their goals. Pajares observed that students with low self-efficacy may perceive work to be harder than it actually is, which can cause negative emotions like stress and depression. Many of my students struggle with self-efficacy and I encourage them to begin by setting small, reasonable goals, like staying after class to ask the professor about an upcoming assignment instead of committing to an office hour. As they gain confidence doing the small things, they can then take on bigger challenges and build self-efficacy along the way. I encourage you to do the same: start small to build your confidence.

ATTRIBUTION

Attribution theory (Weiner and Craighead), is a theory about to who(m) or to what people attribute the causes of events that affect them. Basically, if something goes well, who gets the praise? If it doesn't, who is blamed? These attributions are sometimes referred to in terms of a person's locus of control. When a learner believes that their ability or efforts are the cause of their success or failure, they are considered to have a high internal locus of control. On the other hand, when a learner believes that the cause of their success or failure lies outside of their control, they are considered to have a high external locus of control. It is important to note that a person's locus of control is not fixed and can change from situation to situation. Learners' locus of control lies on a spectrum and is also highly dependent on the context of the event. Someone who might have a higher internal locus of control in one context may have a higher external locus of control in another. You might have a high locus of control in your computer programming class but not so much in your sculpture course. Or, like me, you might generally have an internal locus of control when things are going well but as soon as they fall apart have the instinct to blame someone else, which in some cases is warranted. While it might seem like an internal locus of control is always a good thing, having an extremely high internal locus of con-

trol can be a problem, especially when the outcome of an event is perceived as a failure. Those who believe outcomes are completely in their control may suffer from a loss of self-esteem (Abramson, Garber, and Seligman). I see this occasionally with students who enroll in college right out of high school. The students at my particular college struggle with perfectionism. So, when a student who has done very well in high school and attributes their own success to being smart and working hard gets a non-passing grade on an assignment that can sometimes send them into an emotional tailspin and lead to doubts about whether or not they are “good enough” for college. I often try to affirm these students’ intelligence and work ethic while also pointing out it is totally normal for students to struggle in a new environment or in a subject or academic field they haven’t studied before. A rigid internal locus of control in this context is not helpful.

PROBLEM-EXPLORING AND ANSWER-GETTING

Writing studies researcher Elizabeth Wardle argues that there are two dispositions that help explain how learners manage “well-structured and ill-structured” problems they encounter during the course of their learning. A well-structured problem is one that is pretty straightforward: there is a clear answer, and that answer is not hard to find. An ill-structured problem is much messier because there is not only one answer, and the answers that do exist are not immediately obvious. Simple math is often well structured: I have two dogs and if I get three more dogs, how many dogs will I have? Too many, according to my neighbor. But the real answer is 5. An ill-structured problem might be something like how can I teach my dog to pick up a tiny basketball and drop it into a tiny hoop? There is not one obvious solution to this problem as dog training requires different approaches and techniques depending on the dog, and there would be both creative thinking and trial and error involved in figuring it out. A well-structured problem in a writing class might look like a quiz on MLA citations whereas an ill-structured problem could be like the one that Wardle describes in her article where students in a Medical Writing class identified a local health problem and then created a campaign to help solve it.

Wardle found that her students often exhibited two kinds of dispositions when faced with these types of problems: problem-exploring and answer-getting. “Problem-exploring dispositions incline a person toward curiosity, reflection, consideration of multiple possibilities, a willingness to engage in a recursive process of trial and error, and toward a recognition that more than one solution can “work.” Answer-getting dispositions seek right answers quickly and are averse to open consideration of multiple

possibilities.” When faced with well-structured problems, students with either disposition were able to identify an answer. However, when looking at an ill-structured problem, students with answer-getting dispositions were more easily frustrated and less likely to think outside the box and approach the problem from multiple angles. Think about problems you have encountered in your own life, both in and out of school, and make a guesstimate. What percentage of those problems are well structured and what percentage are ill structured? How have you worked to solve the ill-structured ones? Can you see how your disposition towards solving that problem impacted the approach you took?

WHAT CAN YOU DO WITH KNOWLEDGE OF DISPOSITIONS?

Currently, scholars from many different fields and academic disciplines are exploring the impact of dispositions on learning within those fields. A quick search of your library’s database (or, don’t yell at me library friends, Google Scholar) using the key words dispositions + learning + the name of the field (e.g., computer science) will reveal the range of interesting work being done. For those interested in studying learning, dispositions offer one avenue for exploration.

For me, being able to step outside of myself and look at a learning situation to identify my own dispositions in that moment has helped me reflect on the extent to which they are working for me. In one of the writing classes I teach, we spend the first half of the semester talking about the beliefs students have about writing and about themselves as writers and reflect on the root sources of many of those beliefs. We also explore the ways in which some of those beliefs are impacting their learning-related behaviors. Then, in the second half of the course, students choose a belief or behavior that they feel is not serving them well, and design a study in which they test out three different methods or tools for making small changes to that belief or behavior. Many students choose to study one of their own dispositions, with self-regulation being the most popular.

Even though this is a book chapter and not a class, I would encourage you to do the same. As you read about dispositions, did you feel seen? In what ways are your own dispositions towards learning working for you? In what ways might they be more limiting than you previously realized? Whenever you identify one, and you think it is not working for you, reflect on concrete actions you might take to try to revise that belief.

Wherever you are on your learning journey, please remember to pack your new knowledge of dispositions. And, if I do become a wildly successful YouTuber, remember to like and subscribe.

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TEACHER RESOURCES FOR “DISPOSITIONS TOWARDS LEARNING”

OVERVIEW AND TEACHING STRATEGIES

This is a chapter that introduces students to dispositions, or the beliefs about learning and themselves as learners, and discusses the ways in which dispositions can impact learning behaviors. Specific dispositions taken up in this chapter include *expectancy-value*, *self-efficacy*, *self-regulation*, and *attribution*, *problem-exploring* and *answer-getting*. This chapter would be well-paired with Kara Taczak’s chapter on knowledge transfer from *Writing Spaces*, Volume 4, as writing studies researchers have argued that dispositions play a crucial role in students’ transfer of knowledge.

DISCUSSION QUESTIONS

1. Before reading this chapter: think of a time that you learned something that was really challenging. What was the thing you learned and what made it so difficult? How did you eventually overcome those challenges and learn what you wanted?
2. After reading this chapter: go back to the pre-reading question #1, and ask yourself if dispositions played any role in your eventual learning success. Which ones? In what ways?
3. Thinking about the dispositions you have towards learning in general, can you think of how you developed those dispositions? What events or experiences from the past helped you form those dispositions?
4. What is something you are learning to do in school right now that is challenging? What dispositions are at play in that context? Are those dispositions serving you well? Which, if any, do you want to change?
5. If you are going to reflect on a disposition you might want to change, what steps might you take to do so?