

How we learn

In this course, we'll explore how we learn. Understanding our learning process helps us identify what's needed, make adjustments, and engage in deliberate practice to grow as writers. Knowledge domains represent the cognitive and physical activities involved in mastering skills like writing, dancing, reading, or playing music. While imperfect, these categories are helpful tools for understanding complex concepts.

For example, too often, we imagine that good writing means writing a grammatically correct set of sentences that stick together. While that is an aspect of some good writing, there is no one-size-fits-all rule for good writing.

All good writing, as you will learn, is context-specific. Following the rules of grammar pertinent to Standard Academic English (SAE) may be exquisitely necessary in one situation, and may in another be a novice mistake. For example, in a casual email to a friend you would likely not use the locution, "To whom shall I send my application?" and instead opt for the SAE-violating but rhetorically friendlier and more accessible, "Who should I send my application to?" A skillful writer develops tools that help them adapt to different writing situations, grammar rules being one of the least important in the toolkit.

Knowledge domains

There are four basic knowledge domains that one uses to learn nearly anything, including writing:

- **Declarative** knowledge is the actual information, the facts of the matter—knowing what something is. This category is also known as subject matter or subject knowledge. This knowledge domain is the one often focused on in school, when you are asked to memorize facts and concepts. Declarative knowledge can generally be confirmed through such devices as multiple choice or fill-in-the-blank tests, trivia questions, or paper assignments where the main goal is to demonstrate that you have learned the subject matter the teacher assigned you.
- **Procedural** knowledge integrates facts and concepts into physical practices that present themselves as strategies and skills. It's the knowing how. For example, you may be able to explain what addition and subtraction are (declarative knowledge), but not know how to add or subtract. You may be able to explain the meaning of a song lyric, but not know how to write a song lyric. You may be an expert back-seat driver, but if someone put you in the driver's seat, you wouldn't know how to parallel park the car.
- **Conditional** knowledge involves knowing when and where to use one's declarative and procedural knowledge, and with how much intensity. Your conditional knowledge is what allows you, for example, to use your declarative and procedural knowledge to adapt to situations that are somewhat alike but that require adjustments; for example, if you play a sport, you have to adjust to different playing fields and temperatures, new opponents, the ball taking an odd bounce, or simply feeling a bit tired that day. Conditional knowledge helps you adjust to the conditions of the situation. Ancient rhetoric teaches this category as well, with its concept of *kairos*: knowing the right place and time to speak or to listen. Consider, for example, learning how to ride a bike. There is the declarative knowledge, which mainly entails understanding the basic parts of a bike, such as the handlebars, wheels, pedals, brakes. There is the procedural aspect, which involves learning how to balance, steer, stop. Then there is the conditional, such as when to change gears, or to swerve out of the way of a hole in the road, to put more or less effort into pedaling, and to apply the brakes with more or less force.
- **Affective** knowledge, the fourth major knowledge domain for learners, includes "emotional IQ," but at a more refined level than we are customarily taught in popular culture. That is, the affective domain involves learning which attitudes and emotions are most useful and appropriate for the task at hand. It may include understanding your own emotions, as well as those of people around you if they are also involved in the task.

More on affective knowledge

Educational psychologists, for example, have found that successful learners have the following kinds of affective knowledge:

- Attribution: A successful learner will do their best to take responsibility for their own learning. The successful learner views failures as an opportunity to refine their learning process, figure out how they can do better. Should they have sought out help? Should they have given themselves more time? Should they have read the book more carefully? The unsuccessful learner tends to feel powerless and to attribute their failures either to some deficiency in themselves or some deficiency in those around them. While the successful learner sees learning as something they can control, the unsuccessful learner feels impotent, frustrated, and angry.
- Resilience: resilience is another quality that researchers have found in successful learners. Resilience is the ability to bounce back from mistakes or failures and be determined to do better the next time.

Two other affective tools for successful learning are the disposition to learn, which is bound up with a fourth, referred to as self-efficacy. A person who is confident that they can learn to do something (a strong sense of self-efficacy) will be open to learning new things. However, a person who has an inflated sense of their own abilities will often lag behind other learners (i.e., someone who feels they are so great at something already that they have nothing to learn). A study of beginning swimmers, for example, showed that those who felt they were already good swimmers—and therefore didn't need any lessons—often had to be rescued, whereas those with a more realistic sense of self-efficacy and disposition to learn learned how to swim more quickly than their self-inflated colleagues.

Finally, a fifth affective skill for successful learners is self-regulation. Self-regulation means that you are able to manage your emotions when you are learning something. Everyone feels frustrated when they are in real learning situations. Sometimes we get into a groove—such as writing papers in high school—and feel blindsided by having to learn new writing skills in college or in the workplace. When you discover that something isn't coming easily to you, self-regulation comes into play, allowing you to acknowledge the frustration but not to start punching holes in walls or quitting because it's difficult. Instead, self-regulation means taking some deep breaths, experiencing the frustration but also knowing it will pass with time and practice. Everything we learn takes practice. Indeed, frustration is one of the signals that you are likely learning something new.

We will be asking you to apply and reflect upon these domains throughout the semester to the many new things you will be learning as a writer, along with some things that will be familiar to you, turning to these domains with each of the modules this semester, asking you to assess what you learned and what the challenges were, and applying these domains.

Roasted Pepper Example

An easy-to-remember example of learning domains is that of roasting a red pepper on a stove. The cook knows what a red pepper is and has a recipe for roasting the pepper—all of this is declarative knowledge. The cook also knows how to roast the red pepper (procedural) and precisely how high to adjust the flame and how long to leave the red pepper on the flame (conditional). The cook embraces the slight impatience they may experience if the pepper takes too long to roast, or the slight disappointment if one side gets a little more charred than desirable, but will not lose their temper and start breaking dishes (affective).

Research on knowledge domains in writing points to a rather breathtaking number of domains that skillful writers need to master, from the most obvious, such as putting words on a page, to the most subtle domains that enable you to unlock the social life of an otherwise boring little genre and make it work wonders for you and your readers.

Task In the discussion thread below, describe the most recent experience you had with learning something that was not academic/school-based in nature. For example, learning to dance, cook, sew, row, play an instrument. Apply all of the knowledge domains: declarative, procedural, conditional, and affective. 150-350 words.

Here and throughout the course, I encourage you to comment on each other's posts and use the "like button" liberally! You might be surprised at how such simple acts of acknowledging each other will make the seminar more fun and communal.