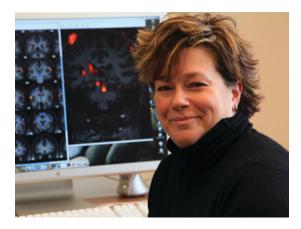
Sticky Teaching

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As teachers we rely on the fact that human beings are fundamentally curious creatures. Additionally, people tend to have a natural curiosity about themselves and those around them, which gives psychology teachers an excellent advantage in the classroom. Despite this advantage, many of us see our students again in higher-level classes and wonder why the lessons we know we taught them did not stay with them. We wonder, why didn't my teaching *stick?* We all know that it's far easier to recall the contents of a Discovery Channel program than a two-hour topical lecture, but few of us understand why this is the case. Malcolm Gladwell and Dan and Chip Heath have looked to the business and advertising worlds and discovered six concepts that are surprisingly relevant to making ideas "stick" in peoples' minds: Simplicity, Unexpectedness, Concreteness, Credibility, Emotion, and Stories. These ideas can be applied to teaching, and in this essay, I will show you how you can apply them in the classroom.

Simplicity

Simplicity doesn't mean "watered down." That is a common mistake. Simplicity means accessibility. It means communicating the material in a universal language. One of my favorite examples of making a traditionally complex idea simple (i.e., accessible) is synaptic transmission. Students often believe that the brain is way too complicated for anybody to understand. This is simply not true. One of the ways I teach neurotransmission is to ask if any of the women in the room are still conversant in eighth-grade girl language (don't worry, there are always at least two or three in the room). Then I ask, "If you're in school, and one of your 'besties' comes rushing down the hall saying, 'Oh my God! Oh my God!!', what is the appropriate response?" I promise you that more often than not a student will answer along the lines of "Oh my God, WHAT WHAT?" This response matches the excitement of the "bestie" flawlessly, and it's usually followed by a pause before the excited girl will spread the news she was carrying to the rest of her peer group. That's how neurons work. A neuron gets really excited, "Oh my God! Oh my God!!"; and then a receptor responds, "Oh my God! What? Really?"; and then it's off to go find the next person (or cell) to share information with. That's how neurons work. That's it. The

charge comes down the school hallway (or axon), there's an exchange between two parties (neurotransmitters are released from vesicles crossing the synaptic cleft and received by the dendrites of a neighboring cell), and the information begins to spread. An eighth grader who has just heard incredible gossip feels compelled to tell at least four people, and neural networks get excited in a similar way. They're eighth-grade girls. That's all neurons are. I bet you're not going forget that now. That's simplistic, but not watered down.

You can easily extend this analogy to neurotransmitters. Imagine the same eighth-grade girl comes running down the hall in an American school, but she delivers the same message in Bulgarian. What happens next? The girl on the receiving end will probably respond with something like, "Uh, what...I don't understand." If you don't speak the same language, you can't have a transmission. That's what neurotransmitters are. Serotonin's different from Norepinephrine or Dopamine. These chemicals are just languages that neurons speak. Notice — this material is not watered down, but it's simple. What is neuroplasticity in this analogy? Ever seen how groups of teens change their behavior depending on to whom they are "talking to." You can carry an analogy very far if it helps make a more complex idea approachable and accessible.

Contextualizing material for your students is another form of simplicity. One easy approach is to ask them questions such as, "So, how many of you guys have had an experience with 'X'?" It's important to interweave difficult concepts with material or experiences that students are familiar with. In sum, start with something you know you've already gone over and they're aware of, or provide a relevant and apprehensible context for the information, and then build their understanding from there.

Unexpectedness

Unexpectedness is the element of surprise. This concept is how all the fantastic programming on the Discovery Channel holds our attention for hours. You can do this in your classroom too. Find the most unexpected piece of a concept and present it first, just like a cliffhanger. Once you have your students' attention, the rest of the explanation will be gobbled down like their favorite sweet treat.

For example — I would say to a class, "Did you know that you can increase your performance on math tests by almost 30 percent simply by activating your identity as an Asian, and avoiding your identity as a female?" Then I would segue into the concept by saying:

Now that I have your attention, Ambady and colleagues (2001) conducted a study about the effect that different stereotypes have on performance. There is a stereotype that females are bad at math and a stereotype that Asians are good at math. So, what happens if you're an Asian female? The researchers had women come to their lab on two separate occasions to take a battery of tests, including a math test. During one visit their female identity was activated, and during the other visit their Asian identity was activated. The same person demonstrated a 27 percent difference in their performance based on whether they were primed by their Asian or female identity.

By sharing unexpected findings, you can keep your students enthralled while you explore the nature, development, and effects of stereotypes. Every area in psychology is rife with interesting findings. There are two relatively easy ways to find new and unexpected examples for your teaching: One way is to be on the lookout for popular press accounts of unexpected scientific results, and another way is to do a

search of recent literature in the area you're about to teach. The point is, start with an unexpected cliffhanger and use their interest in that story to deliver the concepts.

Concreteness

Teaching in a concrete manner can take several forms. Probably the most obvious of these forms can be thought of as "choosing your battles." This concept works by letting your students know at the beginning of class, "This is the lesson of the day. If you walk out of here learning only one thing today, this is what I want you to understand." Make sure to sprinkle this one lesson throughout your lecture, and make sure to come back to it at the end of class.

It's also important to be concrete about what smaller things within your lecture are critical for your students to learn. Really emphasize what is most critical for your students to know. Something as simple as pausing and saying, "This is especially important," or "You guys – make a note right now, this is something I really want to make sure you understand. So, if you don't understand it, come see me or spend some more time on it because it's important." If you can, try to look at as many faces as possible while you're making these statements, because in every classroom, there are at least one or two students who are confusion barometers. These students have no control over their facial expressions, so when you ask the room if everyone understands a particular concept, they stare at you with a mix of confusion and terror. Use those students in the room (who were too cool or too good at self-monitoring to signal to you that they were lost) will appreciate going over material one more time. It's also important to try to use a different example or different context when you're re-emphasizing the point, because for some students it may be the context or the example that was hard for them to follow. Plus, for students who understood the point, a new example will keep them from tuning out.

Credibility

We have a certain amount of inherent credibility as professors that professionals in the business and advertising world do not. The most important aspect of credibility, as a teacher, is to be open and honest about not knowing something. When you don't know the answer to a student's question and offer a fluffy distractor, students will notice. You will also likely lose your credibility with them permanently. For example, say you respond to a question with something like, "You know, that's not really relevant. And that's not going to be on the test, so you don't have to worry about that." You're being dismissive. Brushing off a curious student is never a good idea. It's absolutely fine to say, "That's a really good question. I have absolutely no idea. But, I do know where to find the information." Given that you went to school for a minimum of 40 years (or thereabout) to earn your degree, you know exactly where to go to get that information and how to make it accessible to your students. So when you don't know something off the top of your head, let your class know that you're going to make a note of it, and either email the answer to them, or bring it to the next class meeting. Responding to a tough question with something like, "You know, that's great! I hadn't thought about that," works because your students will feel like they're smart and that you're willing to engage them in serious academic discourse. It's also important to remember that (with few exceptions) the student is not challenging your authority or intellect. No one can know everything. A lot of us have the privilege to teach students who are exceptionally bright and curious, and if we measured raw intellect they might in fact be "smarter" than us; however, they don't know the field of psychology the way we do. We can navigate it for them.

Intelligent students and a confident, informed professor to navigate make for smooth and exciting sailing.

Emotion

We know that the right level of emotion and arousal are critical for learning. The subject matter of psychology can be pretty emotionally arousing on its own, but you can also influence emotion a great deal through your teaching. One way to increase the emotionality of information is to make it personal. For example, if you were discussing peer pressure and asked your class to close their eyes and remember middle school, to remember the cafeteria or a specific classroom and describe the image to themselves, I guarantee you would conjure some strong emotion. Creating tangible examples that your students can feel for themselves creates a more memorable experience. Another example comes from understanding auditory hallucinations. You can ask your students if they can imagine one of their parents admonishing them. Ask them if in their minds they "hear" their parent's voice, and almost all will tell you they can. Then ask them to further imagine hearing a "typical" big angry man saying the same words, and most will say they can also do this. Finally, ask them to think about what it would feel like if they didn't realize that they were generating these "internal voices" themselves. Imagine hearing something so real, and not realizing that you yourself were creating it. It's a rather scary proposition, one that packs a powerful emotional punch and brings a new understanding to "hearing voices." You can create learning situations that are very relevant to your students in class by trying to tie the points in the lecture you want them to remember to things that your students have (or can imagine they have) experienced. When you're planning your lecture, ask yourself, Why should they care about this? How does the material apply to them?

Emotion also needs to come from you. You need to be passionate about what you're teaching. And if you're getting bored with your course, reinvent it. Find something you love, because that's so much better than forcing yourself through a topic you're not emotional about. Even if it takes you slightly off topic, find something that really excites you because it will excite your students too.

Stories

Stories are critically important to sticky teaching. They often serve as examples that present the material from another perspective or contextualize the concept being taught. It's never a good idea to cover difficult material for more than twenty minutes without some sort of mental break. Students need a break. And by a break, I mean a brief time during which they can rest their minds a bit or catch up on their notes. Students appreciate, sometimes, when you say something like, "Okay. This isn't going be on the test but I have to tell you guys a really good example of what we were just talking about." When you share stories, the students who need to catch up on their notes will tune you out and catch up on their notes, while other students just need a two-minute break to let their mind consolidate some of the information you have just given them.

When I teach Introduction to Psychology and we get to the section on memory, I get the chance to tell one of my favorite stories to illustrate how suggestibility works. This story illustrates how co-occurring events can be combined and embellished over the years to form a logical, and causal, explanation of a past experience in a child's mind. This story is about my youngest brother and the Goodyear Blimp. A few years ago, I was sitting in a tavern with my brother having a nice night of catching up and reminiscing. Out of the blue my brother says, "Hey, remember the time I got knocked over by the Goodyear Blimp?" I stare at him with utter confusion, and say, "Um, no I don't remember that." My brother then starts describing the day and what had been going on, and I suddenly remember exactly what he was talking about.

What really happened was that we were playing in the backyard, and the Goodyear Blimp passed overhead. It appeared to be descending to some location near our house (an optical illusion that children are prone to). We decided that we had to see where it would land. We tore through our yard and out onto the sidewalk. We were running down the sidewalk when I heard, "Boomph!" I turned to see Chris pulling himself up with skinned hands, skinned knees, a skinned chin, and tears streaming down his face. He fell because he was running while staring up at the blimp. I brought him home and explained to our Mom why we were out on the sidewalk and not in the backyard where we were supposed to be. Following our brief, but intense, admonishment, Chris got all patched up and that was the end of it.

Fast forward to a Boston pub twenty years later when I heard, "Remember when I got knocked over by the Goodyear Blimp?" Because Chris had been looking at the blimp when he fell, the two events got stuck together. That's how suggestibility can work. An added bonus of using stories in the classroom is that you're often able to incorporate more than one aspect of stickiness at the same time. For example, in the story above, there is also a great degree of emotion and unexpectedness. Stories are, by their nature, concrete and usually credible. In thinking about how the concepts of stickiness apply to your teaching, you may find that it's easy to teach in ways that use multiple sticky factors within the same lesson. And when it comes to being sticky, more is better.

Closing Thoughts

The factors described above have had a significant influence on my approach to teaching psychology. I have come to realize that due to the rapid expansion of psychological science, it's increasingly important to teach process along with content. Process refers to how we can access, evaluate, and assimilate psychological scholarship. In this new information age, scientific literacy is increasingly important not only as an academic pursuit, but as a critical life skill.

Perhaps one of the things I try to avoid most in my teaching is what Robert de Beaugrande recently termed "bulimic education," in which the learner is force fed a set of facts to be memorized for a narrow purpose such as an examination, then purged to make room for the next set of facts. Thanks to the age of information, facts are fairly accessible, particularly to our increasingly savvy students. This is not to say that the fundamentals of any area should be overlooked, but fundamentals are different from facts. Students don't need us to teach them facts; They need us to help them learn to assimilate information into three-dimensional understanding. In an age in which (whether we like it or not) we are competing with all sorts of media for our students' attention, using the same strategies that many of our "competitors" in advertising and business use, can be invaluable. What is particularly wonderful about being mindful of stickiness (simplicity, unexpectedness, concreteness, credibility, emotion, and stories) is that these ideas are not counter-intuitive for most teachers. You're likely familiar with ideas described above, but after thinking about how they could be used collectively, you might find yourself inspired to make some small, and potentially invaluable, tweaks to your teaching.