

*That Aha Moment When Understanding Happens—That Is Why I Teach*

Diane F. Halpern  
Claremont McKenna College

Everyone who has ever communicated something complicated to another person has seen it. It is a troubled expression framed with quizzical eyebrows. As the teacher, the face you are looking into is clearly providing nonverbal cues that your eloquent explanation is not having its intended results and the learner is not learning. Then, sometimes almost magically, sometimes after considerable effort, sometimes after intervention from others, the facial muscles on the learner relax, and you can literally “see” the learner crossing to the other side. Something new is now understood. Mission accomplished. You really are a teacher—at least for this moment. Even if what was learned was as mundane as how to get around the new detour to your home or as deep as the premises of democratic systems of government, the magic of learning is the same. The learner is a changed person (okay hyperbole is allowed in informal writing like this, maybe the change is small), and teachers can help to direct that change. With one thought leading to another, who can predict what chain of thought a good teacher can start in an intelligent and motivated student? There is always the hope that even a small link will be added onto the long links of thoughtful students as they weave their world and create their future.

I have many opportunities to interact with the future in my current position as professor of psychology at Claremont McKenna College, which is one of the colleges in the Claremont University Consortium. I know that the students in our classes will be leaders in all sorts of positions after they graduate, so I take special care to bring in multidisciplinary perspectives whenever possible, so that they consider how psychological theory and research influence public policy, law, economics, values, business practices, international and multicultural interpretations, across the life span, and so on.

I am also the Director of the Berger Institute for Work, Family, and Children, whose mission is to advance education and research about the ways these variables interact to promote family-friendly work policies and work-friendly families. I have been fortunate in having a very public platform for many topics that are important to me, such as better integration of work and family life, reducing prejudice, and achieving a better understanding of changes in the process of retiring because I served as president of the American Psychological Association in 2004.

## My Early Development as a Teacher

Although I have always cared about quality teaching, I have not had any formal instruction in teaching. I recall the excitement and terror of being assigned my first college-level class to teach when I was still a graduate student. I felt fairly confident about my ability to handle the content matter, I knew that I was clueless about how to “give it away” to others. I recall thinking that I should write a syllabus and keep track of grades and do those things that were “done unto me” in my role as student. I modeled myself after those teachers who inspired a love of learning in me and tried to stay away from the practices of those that did not, but it all turned out to be harder than it looked. I soon realized that I had no idea how to grade an essay (oops, is there some trick to this?) or how to handle student sob stories (not all of which are legitimate), or cheating, or egads, this was not as much about love of learning as I had thought!

Fortunately, semesters pass and I always come back to that moment when understanding happens, and over time I learned from many other colleagues about the need to have policies to deal with cheating or late papers and those other aspects of teaching that get in the way of understanding. I continue to learn from good colleagues both on my own campus and those I have met at conventions and through professional work, and my students continue to guide me through these rougher spots. Every time I leave the classroom for an administrative assignment for a year or so, I always return because the classroom is where understanding happens.

## Working at Defining Myself as a Teacher

By training (a word that many psychologists really dislike—I was once told that students are educated, monkeys are trained), I am a cognitive psychologist, with specialized interest in how people learn, remember, and use information. Because of my cognitive background, I have a particular obligation to teach in ways that promote good learning, learning that lasts a long time, and that is easily recalled in situations where the information that is learned is needed--in other words, out of school. I need to teach for long-term retention and transfer, and I should be using the principles of cognitive psychology when I teach. Not surprisingly, I try to live what I preach. (For those of you who are interested, I have additional information about these principles at my Web site: <<http://Berger.ClaremontMcKenna.edu>>. From the home page, scroll down to “Applying the Science of Learning for more information.”) I briefly present here some of the guiding principles that I use in every class.

### *Applying the Science of Learning*

Learners need to practice “remembering” the information I want them to know, and they need to practice retrieving it from memory under the different contexts where it might be

needed. Consequently, they need to they recognize when to recall the information they learned. This desired learning outcome translates to applying what is learned in college classrooms outside of class in a variety of contexts, where it actually is intended for use. So, my classes always involve many assignments that involve applying the principles we are learning and some reflection on the how well students' own experiences reflect the theories and research we discussed in class and read about in the text. This sort of assignment incorporates many principles for good learning—active involvement, spaced learning, and connected learning, which forces learners to connect what they are learning with information they already know, whether from other classes or other life experiences.

### The Examined Life of a Teacher

Over time, I have become less ambitious in the quantity of information I attempt to cover in any single course. Unfortunately, this change does not sit well with other forces in the field, as I must be sure that my students are prepared for Graduate Record Examinations and the next course in course sequences; students must also meet the expectations of others for whom I am preparing them. Course “coverage” is an apt term because it conjures an image of a veneer of knowledge—not the sort of knowledge metaphor that I want to promote for those to whom I am entrusting the future. Sometimes, a veneer is enough, as long as the learner knows the limitations of her or his knowledge and knows where to go for a deeper understanding. For example, I have only the thinnest veneer of understanding of how my car works. If it breaks down, I take it to someone who knows more; I do not attempt to fix it myself. I think we need to be more honest about the level of understanding we are providing in any course and be sure that students know the level of understand we think they have.

If I want to ensure a deeper level of understanding, then I cannot just talk in front of a class or assign textbook or other reading. Students need to engage the information to be learned (unless it is very simple). Consider this example: It is difficult to conceptualize the number of statistics courses being taught every year or the number of students learning statistics every year, yet we are always surprised at how few “people” understand basic concepts when they are applied outside of class, such as the fact that confidence intervals around the means of large samples are smaller than those from small samples (and what the concept means and why this information is important). Students can write the correct answer on an exam, yet not understand the principle when they encounter it in slightly different language or in an applied context. There are many similar examples we could all provide. The idea is to teach with a learning goal in mind that extends beyond getting a good grade on the exam at the end of the term.

### *What Do Students Know One Year After Graduation?*

When I teach I try to keep this guiding question in mind: What do I want students to know one year after graduation and beyond? The grades students get on tests at the end of the semester are not the reason they attend college, and grades on college exams should not be the goals to which I teach. I need to have a clear teaching goal, and I need to share this goal with students as their learning goal. As readers can probably see, my own teaching philosophy grew from my academic background in cognition and in the assessment of student learning. If I want to assess what students are learning, then I need to give careful thought to what I think they should be learning and then see how well we are jointly meeting that goal. Again, the idea is not realized because I cannot routinely assess learning one year after graduation. Few students see this goal as something they are willing to participate in and few are willing to put themselves through the stress of assessment a year after graduation. (Testing has taken on a negative connotation—assessment suggests more useful feedback, although there is no reason why either word should be more or less negative or positive.) Despite the fact that I cannot (yet) actually assess student learning one year after graduation, I still find thinking about learning for a long-term goal to be a good way to think about teaching and planning for teaching and learning interactions.

### *The Teaching-Learning Continuum*

It is unfortunate that the English language has separate words for teaching and learning as though one can teach without learning happening. It is not unusual to hear professors complain that they did a great job teaching, but the students, unlike those in the “good old days,” would not learn. It makes me wonder where the learning went. Other languages have a single word for the teaching-learning continuum or teaching-learning interaction. Once I started to think about teaching and learning as a reciprocal unit, I also changed how I viewed my role in my half of the equation.

### *Assessing Learning Outcomes*

Perhaps the biggest change over the decades since I received my doctorate and began my career as a college professor is the emphasis on learning outcomes—what students know and are able to do when they complete a portion of their education. I was active at the beginning of the outcomes assessment movement (it sounds so radical to call it a movement, but it really was radical at the time—we wanted to know what students actually knew.). The shift away from what professors did to what students know and can do is a good move as it moves along that teaching-learning continuum and acknowledges the connections between the two. It also caused faculty who care about student learning to look more critically at what they wanted students to know and do and how they were promoting these outcomes.

There is an old saying in psychology that when we care about something, we measure it. I still believe that this saying is true. By assessing learning outcomes, we are publicly saying that we care about what and how much students learn. For many, maybe most, faculty, it was the first time they heard that learning really mattered to anyone on their campus. Despite glossy views that tout great teaching on every college campus, most faculty are rewarded for the research they publish, grants they receive, book contracts they sign, and other more easily counted currency of faculty achievement. The shift toward learning outcomes was welcome for many of us who genuinely care about student learning, even if it falls short of its promised goals.

#### Advice for New Teachers

My lack of formal instruction in the science and art of teaching soon caught up with me, as it did not take me long to realize that there probably was something to know about how to teach beyond “do what I saw others do.” New teachers can avoid this awkward period of realizing their own limitations and can seamlessly continue with their own education. Even though I did not have formal class work, I was able to catch up after graduation by attending teaching seminars and learning from many of the great teachers at teaching conferences all over the country, and more recently, in other countries. I still attend teaching conferences regularly because there is always something to be learned that I can apply to the class that I am teaching that semester. I have been fortunate in being able to join the great group of teachers in the Society for the Teaching of Psychology, and I read teaching journals and the American Psychological Society (APS) teaching column on a regular basis. Students give me frequent feedback, and I always try to listen carefully and to make the modifications and changes that they suggest will help them learn better. So much keeps changing as technology changes how we get and use information and the way we need to use information. There is a greater need for cross-cultural understanding, or perhaps I am just more aware of the need that always has been there. It is as essential to keep current in the field of teaching and learning as it is in one’s substantive area, if that area is something other than teaching and learning.

#### Final Thoughts

Advice is easy to give and hard to take, except perhaps in the abstract, when there is no implied deficiency going along with the advice. Every time I teach, I leave the classroom feeling up, even on bad days. (Okay, so maybe *every time* is too strong, almost every time.) I feel better after I teach than before. For me, the emotional component is the test that I made the right career choice; it is as close to the creative idea of “flow” that I will probably get. How will you know if it is the right career choice for you? There are many individual factors and there are good and not as good days, but I hope that you will have some vision of a

greater good and a feeling of having found your career path. Over the years, in my positions of department chair and other administrative roles, I have had to suggest that maybe some people were not best suited to be teachers. It rarely happened, and it is just a matter of thinking about where your talents best fit. Do not take a less than great day in class to make this decision, but consider an overall pattern that extends over more than one semester and an honest effort to be your best.

### *Keep Learning*

Come sit down next to me and the others who are contributing to this e-book as we all continue to attend learning institutes and workshops because we know that there is much more to know and that we can learn from you and from each other. We listen to our students and to newcomers to our field who know how to see old problems with new perspectives and can help us all become better learners. Try to imagine a group of dedicated teachers who did not keep learning!

### *Get Involved*

Be a joiner. I wish I knew earlier in my career that there groups of professionals who cared enough about teaching and learning to write about it, study it, and support each other. Now you know and there is no excuse to not get involved early. We need you to write the next volume of this book.

---

<sup>†</sup> From T. A. Benson, C. Burke, A. Amstadter, R. Siney, V. Hevern, B. Beins, & W. Buskist, (Eds.), *Teaching psychology in autobiography: Perspectives from exemplary psychology teachers* (pp. 135-140). Society for the Teaching of Psychology. Retrieved [insert date] from the Society for the Teaching of Psychology Web site: <http://teachpsych.lemoyne.edu/teachpsych/tia/index.html>