

Learning and Teaching

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I am the Arts and Sciences Centennial Professor of Psychology at West Virginia University. I received my PhD degree in Psychology from the University of Alabama in 1969. I have authored 100 research articles and chapters and have edited 5 books and special issues of professional journals. I served as President of Division 25 (Behavior Analysis) of the American Psychological Association and am a Fellow of Divisions 2, 3, and 25. I also have served as President of the Association for Behavior Analysis, the Southeastern Behavior Analysis Society, and the Society for the Experimental Analysis of Behavior. I have served in different editorial capacities for several professional journals, including as Editor of the *Journal of the Experimental Analysis of Behavior*. In addition to receiving the Society for the Teaching of Psychology's Robert S. Daniel award for excellence in teaching, I received the Division 25 Distinguished Contributions to Basic Research award, and my University's major awards for teaching and for research. My international activities include teaching and research appointments at universities in England, Brazil, Mexico, and France. I also am the curator of a museum at West Virginia University for preserving historically significant behavioral research equipment. Recently, my classroom teaching has included courses in the experimental analysis of behavior, behavior theory and philosophy, and the history of psychology. I have chaired 36 MA theses and 30 PhD dissertations.

My Early Development as a Teacher

From my earliest graduate study, I wanted to work in a university. I was attracted by the dynamic cutting-edge qualities of its research, its openness to ideas of all sorts, and the amazing freedom to explore those ideas, both conceptually and empirically. Teaching certainly was part of the attraction because it embodies all of these things. It furthermore provides the occasion to learn both for the teacher and for others. Teaching, however, was not my *raison d'être*. Rather, it was, and is, an essential component of the larger intellectual environment afforded by institutions of higher education.

Coming of intellectual age in the mid to late 1960s, a period before the development of systematic accountability for teaching, I received no formal instruction in teaching. A 3-year fellowship initially relieved me of the teaching duties normally expected of graduate students. My first teaching experience was in my fourth year of graduate school, as an assistant in the "rat lab" course (Learning) and thereafter as a bona fide instructor for

Introductory Psychology. My preparation was “hands on” and trial and error. I was given the textbook and told to “teach.”

Fortunately, I had excellent role models for teaching in and out of the classroom. Paul S. Siegel was a Hullian learning theorist who taught several of my graduate courses in learning. Paul, a seasoned classroom teacher, epitomized teaching excellence: knowledgeable, thorough, reflective when asked questions, excited about the subject, a commanding presence in and out of the classroom. My first research mentor, as both an undergraduate and a graduate student, was Stephen B. Kendall. Steve was young and full of enthusiasm, intellectual vigor, and a wealth of research ideas. He created the Southeastern Behavior Analysis Center, which is an exceptional research environment for his students, and a masterful stroke of teaching innovation on his part. Steve was always available to engage in dialogue over the latest journal article or new idea that someone wanted to try out. His style was *lassiez faire*, which reinforced my own sense of working independently. My clinical psychology mentor was Charlie Rickard, with whom I also collaborated on a number of research projects. He modeled for me how to work closely and effectively with students. His thoughtfulness, kind and supportive ways, patience, and wonderful personal qualities are ones that I could, and can, only hope to emulate in my own work with students.

Paul, Steve, and Charlie were exceptionally positive role models for me. I cannot leave this topic, though, without also commenting on some *negative* role models, for sometimes it is just as important to know how you do not want to do things than to know exactly how you do. As an undergraduate I occasionally experience awful classroom teaching. I had (only a few) professors who did not provide syllabi, leaving students in the dark about exams and assignments until the last minute, even the day before; and others who were unapproachable, negative, bitter, sometimes rude, and generally unconcerned with their own teaching or with students’ learning. As a graduate student, I had one professor who was disorganized to the extreme and so uncomfortable (whether best described as indifference or anxiety was never clear) in class that he could not solve the problems in class that he had just given on the examination. Another professor was an intellectual bully in both the classroom and the laboratory, always trying to put students in their place and keep them there. My point in bringing up such sloth-like behavior is to note what I learned from them about how not to behave as a teacher, in whatever teaching environments I found myself.

The teaching environment itself, both the classroom and the laboratory, combined with my personal experiences and role models, positive and negative, shaped my behavior as a teacher. The content part was easy, for I was well trained in the areas of psychology that I was asked to teach. For my methods, I drew from my own research on the techniques of arranging suitable learning environments. Processes like response shaping, positive reinforcement,

stimulus control, and their derivatives to this day serve as the foundation by which I create the conditions for student learning in both classroom and laboratory. Good learning environments also involve openness to ideas. Such ideas seem likely to me to be evoked under circumstances that encourage dialogue and cooperation among students and discourage competition for both resources and professor time.

Working at Defining Myself as a Teacher

My own teaching and research have been inextricably linked. My most satisfying teaching has been the one-on-one teaching that I have done with both undergraduate and graduate students in my laboratory. It is there, to borrow from an old tire manufacturing jingle, that “the rubber meets the road.” Concepts are no longer a sterile graph or a terse paragraph, but an outcome of palpable environmental factors impinging on a living, breathing creature. Equally in the classroom, what is taught comes from what we and our colleagues do as our research. If there were no empirical research and only classroom teaching, it would not be long before our discipline would be reunited with philosophy. Every exceptional teacher of psychology need not be an exceptional researcher, of course, but in the long run, teaching in the absence of research would signal the demise of the science of psychology. Furthermore, students need to learn the importance of contributing to the data base of psychology. Nor should these close ties between good research and good teaching be lost on those who administer our colleges and universities.

The biggest obstacle to quality teaching for me has been achieving a balance between the many competing demands so common in all workplaces. Such demands come from within the university itself, the larger professional community, and personal sources. Aging increases the competing demands of time geometrically, for one successful task completion often leads to further invitations for other activities. Teaching is often the most vulnerable in the face of these demands. After all, having taught the course before, knowing the material by heart, it is tempting to just go in and “wing it.” In the long run, however, such benign neglect is the death knell of effective teaching. Students expecting the best from their teachers do not get it, resulting in poor learning at best or their abandonment of our discipline at worst. This type of neglect by professors also can set the occasion for the kinds of behavior that characterized my negative models for teaching, from indifference to downright hostility to students.

The very environments we have helped create determine our time allocation, including where teaching fits in. There are two solutions to competing demands in a temporally closed environment: keep adding on activity and spend less time on each, which means on either becomes more efficient or sloppy in the work, or triage and thereby reduce the commitments. From time to time it seems essential to re-evaluate how one’s present activities fit into broader

goals as a teacher, a researcher, a person; and then to houseclean. The area of self-behavior management is the subject of volumes in both behavioral and popular psychology. I cannot digress to its many details here, but certainly acknowledge its value to me as I have worked to balance my teaching and other responsibilities.

The Examined Life of a Teacher

I am fortunate to have learning as my specialization in psychology, for that area defines the very purpose of teaching. The overriding principle that I take from my specialization is that environment determines behavior. Create the right environment and the behavior will occur. I have already described my view of the right environment, including circumstances that facilitate dialogue and cooperation. Dialogue further implies accessibility to both resources and time of the teacher and of other students. Cooperation implies that teachers and students, as well as students and students, work together as well as independently. Ideas and concepts are stimulated when subjected to the evaluation of others. Organizing the learning environment, whether through a clear syllabus or a clear research plan, even if the latter is nothing more than a series of “if...then...” scenarios, is important in helping students understand not only what is expected of them but also their subject matter and its relations to other issues. Teachers also need to recognize how the student’s environment changes as they learn and, as any good shaper of behavior would do, to “reposition the bar” in terms of both expectancies and level of discourse with their advancing junior colleagues.

Years ago, when I told my post-doctoral mentor of my offer of a faculty position at West Virginia University, his advice was “get a bunch of good students around you and leave them alone.” The core of that advice is solid. It is important for students to have the opportunity to develop their intellectual lives according to their own interests and proclivities; however, such advice can be taken to the extreme of total benign neglect by a faculty member (which, I have seen, does happen). The behavior that we define by “intellectual or conceptual or thinking skills,” like any other behavior, requires a lot of guidance and direct reinforcement in the beginning, a lot of control by the natural contingencies at the end. Over the years I have learned better to accommodate and nurture independent work by talented students. As our perspective broadens with experience, so does our focus on what is important, be it a method of analysis or an area of research. One of the most enjoyable challenges in my teaching has been that of incorporating broader and broader issues into the world view that I offer students.

There are so many satisfactions in good teaching, but my top two are students “getting it” and students going on to successful lives in part as a function of our interactions. Few

things are quite as rewarding as a student coming to a new level of understanding as a result of an interaction with me. The light bulb illuminates and I am always reminded of the jolly scene in George Cukor's film "My Fair Lady" when Liza Doolittle finally articulates "The rain in Spain falls mainly in the plain" to Professor Higgins's satisfaction. He immediately breaks into a happy song, noting "I think she's got it. I think she's got it" as he dances excitedly around the room with her. That is what I feel like doing when students come to an understanding of a difficult, complex concept over which they have been struggling. My second satisfaction follows from the first: It is most satisfying to know that such interactions with students have contributed to their intellectual and personal development. I have described three teachers who deeply influenced my life, and my aspiration is to similarly positively influence the lives of my students.

Satisfaction in teaching comes from the feedback received from students, both verbally and through their actions. The student-teacher dialogue I described previously has a strong element of feedback, which is a powerful consequence for both parties. In addition, good teachers appreciate the fact that only through carefully assessing their teaching, both formally and informally, do they know whether they are, in fact, teaching effectively. Assessment must cover both content and method. With respect to content, professors presumably are hired because of their expertise in the content area to be taught. It is important to be confident, but not arrogant, about one's knowledge of the subject matter. Faculty need to stay abreast of research developments in the substantive areas that they teach. I have already suggested that one stays abreast of research most easily by participating in it. This ideal, however, is not always possible. In the latter cases, staying contemporary with the field by reading journals, attending professional conferences, and working with students on individual research projects may compensate.

In evaluating teaching methods, the goal is to find methods with which one is comfortable that also lead to good student performance. Finding such methods is a big order and often requires experimentation. Like most teachers, I have experimented with different formats in my classes for many years and still continue to fine tune them as student populations, and, with them, needs and expectations change. Many universities are probably like mine in providing useful workshops and teaching forums dedicated to improving faculty teaching. Only a negligent teacher would fail to take advantage of such opportunities.

When it comes to student feedback, a teacher has to be prepared to receive both the good and the bad, and then objectively appraise it. Such receptiveness to feedback holds as well for formal evaluations. Student feedback is important in assessing the content and methods that are used, but it is only one of several factors that must be considered in evaluating teaching effectiveness. Many colleges and universities put significant weight on

“consumer satisfaction” in terms of students’ ratings of courses. High ratings often are, erroneously, taken as de facto evidence of successful teaching. Excellent teachers often do receive excellent evaluations; however, excellent teaching is not *necessarily* manifest through high ratings by students. Of course, much has been written this topic, and the interested reader may peruse those many sources.

Over my years as a teacher, I have become increasingly sensitive to and appreciative of the academic freedom afforded me in a university. Academic freedom underlines the importance of individuals establishing their own standards, and the institution respecting the integrity of those individual standards in assessing teaching quality. The issue arises when I hear younger colleagues discussing ways to achieve higher classroom ratings by modifying standards, testing less, and so on. There is nothing inherently wrong with these things so long as they are done to improve teaching effectiveness.

My concern surfaces when the context of such actions seems more a direct response to improve student ratings or in response to promotion and tenure committees’ reactions to student ratings of teaching, which in turn often reflects the philosophy of the institution. Teaching simply to get high ratings is like taking only easy courses to make all As. Both can be done, but neither shows much. The exclusive or even majority use of student ratings to evaluate teaching undermines the concept of academic freedom for it forces all teaching into a predefined mode around the questions asked of students about the teaching. Ratings have to be taken in perspective of other measure of teaching effectiveness. Faculty must be responsive to student feedback, of course, but faculty evaluation committees and higher administrators also must help by facilitating the development of more effective evaluations of teaching than a simple mean score on a series of items, rated 1 to 5, intended to summarize an entire semester’s activities.

Maintaining and even improving teaching effectiveness, however measured, is an ongoing process throughout one’s professional life. As the research base of the discipline changes, so must the teaching of it. The continuing evolution of my research interests in psychology and my more general intellectual interests contribute significantly to what I have to offer to students in both the classroom and the laboratory. With time, individual teaching styles of faculty members evolve, but as I have noted, teaching demands constant reassessment and renewal as students and circumstances change. Sometimes it is a matter of a tweak here or there, but other circumstances require radical reconstruction of what and how we teach. The best example of evolving teaching methods is that of the assimilation of the wonderful bounty of the digital revolution into higher education. One big challenge of that revolution is that it is one more demand on an already full schedule. Computer technology is but a small example of developments outside the discipline that impacts the methods and

content of teaching in psychology. One of the many pleasures of teaching for me is the endless opportunity to assimilate ideas from many other disciplines into my teaching of psychology. This assimilation helps provide students a broader framework in which to view their often highly specialized work and also to help me place my own teaching and research into the larger world of ideas.

Advice and Final Thoughts

My advice to new teachers is imbedded in all that I have said above. Succinctly: Become and then stay current in both content and methods, reassess constantly, and expand your world view and the implications of your own work with students while remaining grounded in your discipline. Develop short and long term goals for teaching and other aspects of academic life. Revisit and reassess them regularly.

I end this essay where I started, with a few thoughts about teaching in a university. A life time of association with academe has not only reinforced the correctness of my nascent impressions of all of the wonderful things that universities were, but it has also shown that they are so much more than I even imagined at the onset: vibrant, ever-changing, multifaceted, open, intellectually free, stimulating places of excellence and possibility for all involved. Rare places where mistakes are not only expected but are actually tolerated and often encouraged by those in charge of the “manufacturing,” we, the teachers. It is hard to conceive of arranging a more suitable environment for learning and all that it has to offer the world.

[†] 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. 179-185). 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>