

Capitalizing on the Natural Curiosity to Explore and Understand the World

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When I was an undergraduate student, teaching did not seem like a particularly difficult task. From my naive perspective, finding ways to effectively disseminate knowledge in an area of expertise should not require much forethought, effort, and preparation. After all, can talking about your existing knowledge base in understandable and interesting ways really be that difficult? A year or two later, I had my first opportunity to prove that the teaching process really was overrated in its challenges and demands. After spending the first couple years of acquiring knowledge on developmental and family psychology in graduate school, I was now charged with the responsibility of guest lecturing in my area of expertise: the impact of marital discord on the family system. And, I can honestly say that this first real teaching experience put all my misconceptions about the ease of teaching to rest.

Even on topics in my area of interest and expertise, the process of preparing materials for a single class period was agonizing and draining. The same old questions continued to resurface throughout the lengthy preparation process: Out of all the material I could possibly present, how do I go about the process of determining which material is most relevant to present in a one-hour lecture? How much material can I present in the limited time span? How do I synthesize it together into a cohesive, understandable package? And, even more importantly, how do I present it in an interesting way that maximizes the attention and

involvement of the students? These questions were further supplemented by more doubts when it came to actually teaching the class. Do I really know the material well enough to communicate it to the students? Even if I do know the material, how do I regulate my fear and anxiety in ways that will still allow me to effectively communicate the ideas? How will I handle student questions, or worse yet, student boredom?

Although the doubt and anxiety provided me with more than enough motivation to put a substantial amount of time and effort into teaching the class, I still perceived that my first stab at teaching was far from optimal in its result. All the effort I put into preparing to teach only amplified my sense of helplessness and self-doubt in the face of my perceived failure. I made virtually every one of the standard rookie errors. I tried to cram too much information into a small time period. I felt that the presentation and discussion of the material could have been organized better around main themes that flowed more naturally. My stale and dry presentation of the material contributed to several socially awkward and uncomfortable periods during class time that I felt disrupted student learning. My worst fear was becoming another brand of sleeping pills that are all too commonly disguised as professors. And, my worst fear was well on its way to becoming reality. Here I was following the same path to becoming a patented, all-natural alternative to the sleeping pill. To make matters worse, my teaching skills were not noticeably improving over my subsequent opportunities to teach. In fact, things went so poorly that I began to dread the prospect of teaching and, in turn, increasingly questioned whether becoming a professor was really the best career move for me. I was clearly not born with an inherent ability to teach. Looking back, this period of time was a defining moment in my career. It was obvious that I was struggling miserably with my first teaching opportunities. Given the central role of teaching in academic life, I began to seriously consider another profession.

Fortunately for me, I was in one of the rare graduate programs that were designed to train complete academics. As a result, considerable faculty resources, advisement, and support were devoted to training students to become effective teachers through participation in professional seminars, structured teaching experiences, and opportunities to teach courses under the training

and supervision of a faculty mentor. Without this supportive environment, I would have made every effort to eliminate or severely limit my teaching activities. However, through these structured training experiences, I was fully aware that the first few teaching experiences can, as McKeachie (1987) aptly noted, “blight a promising teaching career” (p. 87) if instructors do not continue to approach each teaching experience as a forum for personal learning, training, and growth as teachers. It is all too natural to fall into the trap in which instructor and student apathy feed off each other in an escalating, reciprocal cycle. My graduate mentor, Dr. Mark Cummings, played a central role in preventing this cycle from occurring. I cannot give enough credit to him for all the time and effort he devoted to teaching me how to teach. Words cannot do justice to the comprehensive nature of his advice and support on all aspects of my teaching. But I can say that through these experiences I developed or earned a philosophy that has served as an implicit guide for how I approach undergraduate education.

My actual teaching philosophy is pretty straightforward and simple. My overarching goal is to motivate students to want to learn more about the material. It doesn't take a genius to figure out that long lectures are not the best means to achieve this goal. Students, understandably, do not hang on every word instructors say in long, unidirectional lectures. Moreover, even if, by some miracle, a unidirectional lecture format was able to retain the undivided attention of all the students, students are not necessarily going to be energized to immerse themselves in the material outside the couple of hours of class time each week. Because students ultimately decide what, whether, and how much they learn, successful training requires that the student be intrinsically motivated to acquire skills and knowledge. Thus, at every level of teaching, my biggest goal is to foster student interest in developmental and family psychology. However, ample motivation and book smarts do not necessarily correlate with the ability to assume professional responsibilities in psychology. Therefore, my second main goal is to insure that students are able to utilize the knowledge they gained in the classroom in professional roles. To achieve this aim, it is necessary for students to actively integrate what they learned in the classroom with direct hands-on experiences. The availability of direct, hands-on experiences in recog-

nizing and applying concepts and knowledge to real-life problems in research, teaching, and clinical settings is a fundamental complement to the verbal transmission of knowledge. Accordingly, the goal of motivating students must occur in the context of guided participation and collaboration with students in relevant professional settings.

In my large undergraduate course on social and emotional development, my commitment to these two goals has been reflected in my teaching style. In teaching the survey course, lecturing is one of many methods for transmitting a breadth of basic knowledge and skills to students. However, if used as the sole or primary tool of teaching, lecturing only serves to contribute to the popular conception of professors as lifeless automatons who drone on and on about trivial issues. Thus, my first task in teaching any introductory level course is to break this stereotype. Even with a large group of students, teaching can and should be more dynamic and transactional than simply lecturing to students. To motivate students to want to learn more and more about developmental psychology, I try to directly address two main questions I always had as an undergraduate student. First, why is this area of study interesting and exciting? Second, even if it is interesting, why should I care? In other words, what implications does it have for society? To increase the relevance of the material, my efforts are geared toward underscoring the significance of social and emotional development in the everyday lives of families and children, illustrating how theoretical principles and research findings inform prevention and intervention programs, educational programs, and public policy, and drawing attention to issues of national concern or controversy. To further amplify interest, I generously supplement lectures with videotapes of research and clinical studies, class exercises, demonstrations, live miniresearch studies, and group discussions that are designed to further increase student interest and encourage active participation in learning the material. Even the extra credit options I offer in the class are weighted toward gaining direct experiences through miniresearch and clinical internships. The end result, in my opinion, is a much deeper understanding of the course material and a greater desire on the student's part to learn more about the material outside of the class.

In my upper-level undergraduate seminars (e.g., Seminar in Social and Personality Development, Honor's Seminar, Exploring

Research in Family Psychology I and II), my teaching goals are realized through slightly different methods that are tailored to the advanced level of the students. Because advanced students already have a large knowledge base from survey courses, these courses are designed to provide them with direct, hands-on experiences involved in actually conducting psychological research and understanding its implications for society. Although each class is unique and distinct in its aims and goals, they share a similar interactive format designed to increase an understanding of how graduate courses, academic activities, research groups, and professional and clinical networks operate. Consistent with this goal, students participate in a variety of different tasks, including orally presenting critiques of research, engaging in live debates about controversies in research and its implications for society, leading discussions of research articles, developing research proposals, and conducting and writing up research studies.

One of my primary goals has been to significantly improve the breadth of training experiences available to undergraduate students in advanced seminar courses. For example, at the time that Jennifer Aube and I assumed responsibility for the undergraduate honors program, students complained that the introductory honors seminar course did not provide them with the knowledge and skills necessary to secure a research advisor or conduct independent research in the honors program. It specifically lacked structure, clear objectives, and mechanisms designed to support course objectives (e.g., assignments, tasks, feedback on task performance). In conducting our informal needs assessment, we concluded that two broad curriculum objectives would need to be fulfilled to maximize the likelihood of successfully completing an honor's degree. First, students would need to acquire a broad knowledge base on topics and methods of psychological research. Second, students would also need to specialize in skills and knowledge to conduct a research project in a specific area. To meet both of these goals, the substantive focus of the course was revised to systematically cover research areas and issues that fall under the expertise of psychology faculty. By covering the diversity of psychological areas studied by faculty participating in our research honors program, students met the first objective of understanding an array of theories, empirical findings, and methods that psychologists use to answer research questions across a

number of disciplines (e.g., clinical, developmental, neuropsychology, personality, social). A diversity of different tasks, including oral presentations of research, leading discussions of research studies, and written research proposals, were designed to further familiarize students with the general ways that academic and professional networks operate. By the same token, achieving the second objective required gaining additional knowledge and skills in a specific area of psychology that would permit students to productively collaborate under the supervision of a faculty mentor. Structuring research discussions and assigning oral and written presentations of research proposals within specific areas of interest were designed to help gain the expertise necessary to increase the marketability of honors students to prospective faculty advisors and facilitate a productive and rewarding collaborative relationship with a mentor.

Another course I developed was also designed to fill what I believed to be a gap in undergraduate training in the psychology major. Many undergraduate psychology courses in universities can be classified into one of two different categories. On the one hand, lecture or seminar courses are heavily geared toward providing students with a sound knowledge base in psychology, but often provide little or no direct experience in applying or supplementing this knowledge through guided professional activities in real-life settings. In essence, students are prodded to “know” without “doing.” On the other hand, many independent studies and internships provide a great deal of hands-on experiences without structuring the experiences so that students understand the underlying theory, rationale, and tools psychologists use to understand and improve the lives of people. In this case, an opposite problem occurs: Students are urged to “do” without “knowing.” The obvious gap here is the failure to develop educational experiences in a way that integrates knowledge, action, and application in mutually informative ways. My overarching goal in developing the Exploring Research in Family Psychology Seminar Series was to bridge the gap between knowledge and application by providing a balance between: (a) gaining psychological knowledge through readings, discussions, and lectures in the class and (b) applying this knowledge to better understand the dynamics of research and clinical settings. To meet these objectives, students work on projects geared toward advancing an understand-

ing of family and child development. As integral members of research projects, they gain valuable research and clinical experience through training sessions, meetings with the research team, and the hands-on experiences in executing various stages of the research process (e.g., conceptualization; pilot testing; recruiting participants; conducting observational, interview, and survey assessments; coding; data entry; and analysis). Yet, at the same time, students gain a comprehensive understanding of relevant theories, conceptual issues, and methods in family research through regular readings, class meetings and lectures, and assignments (e.g., oral presentations of research articles, papers).

Despite some differences in specific didactic strategies and curriculum goals across different courses, my teaching style is really rooted in a single, simple assumption: Individuals have a natural curiosity to explore and understand the world. In operating from this assumption, structuring learning experiences in ways that capitalize on the inherent need to understand the world becomes the focal task for teachers. Thus, an important step is to strive to maximize the intrinsic motivation of students to learn by demonstrating why the specific material has significant implications for society. Moreover, it requires organizing teaching contexts in ways that allow students to learn how to apply their knowledge and skills to solve problems and address issues of importance to psychology and society.

The most rewarding experience for me as a teacher is witnessing how students' ways of discovering, exploring, and understanding the world change over the course of their undergraduate studies. I am fascinated not by what the students know but, rather, how they proceed with the process of exploring and understanding the world. Their ability to identify and analyze problems, develop strategies for solving problems, and synthesizing information into qualitatively different packages changes by leaps and bounds over this time period. All these changes are even more remarkable because I see them as occurring in the context of increasing, rather than decreasing, student interest and involvement in learning. These astounding changes in their learning approaches may largely result from the quality of undergraduate students who attend the University of Rochester. I think it's safe to say that we, as instructors at the University of Rochester, are spoiled by the outstanding intellectual ability and character of

our students. Maybe I'm basking in my own delusional thinking, but I'd also like to think that part of the transformation of students is the product of our excellent undergraduate training programs at the University of Rochester. The general curriculum and the specific substance of courses really reflect the value of allowing students to exercise more control and autonomy in their educational process. In this same spirit, I try to limit my control (which is admittedly hard for me as a control freak) and strive to capitalize on the power of natural curiosity to drive exploration, discovery, and education.