Reflections on the Howard Hughes Teacher-Scholar Fellowship (ORDER Program)

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Howard Hughes Teacher-Scholar (2004-2005)

For the past few years, graduate students in the natural and social sciences have had a unique opportunity to convey their research methods and findings to new audiences beyond their departmental and disciplinary homes. “On Recent Discoveries by Emory Researchers” (ORDER) is the brainchild of chemistry professor Dr. David Lynn, and is funded by the Howard Hughes Medical Institute. The animating purpose of the program is to connect people actively engaged in original research at Emory with first-year undergraduate students, and to instill undergraduate education with the sense of curiosity, creativity, and critical thinking that defines worthwhile research. The program taps advanced graduate and post-doctoral researchers at Emory to form small groups of disciplinary experts who work together to craft a first-year seminar based around highly condensed presentations of each instructor’s current research, and to inspire first-year students to come up with their own research questions and, ideally, pursue them during their undergraduate careers and beyond.

Each year, an interdisciplinary selection committee chooses a new cohort of 5 fellows (or, in the ORDER lingo, teacher-scholars). I was fortunate to be a member of the 2004-2005 cohort. Collectively, we comprised a seemingly motley crew of a chemist, neuroanatomist, developmental psychologist, sociologist, and myself as the anthropologist. We spent the summer of 2004 developing a course that maintained the integrity of each of our disciplinary approaches, while simultaneously bridging our diverse research endeavors. This was a truly interdisciplinary exercise, especially as it was the first year that the Howard Hughes program combined natural and social sciences in the same course. Through countless hours of discussing our own research, our own disciplines, and our own pedagogical orientations, we were able to identify a few broad unifying themes and several unexpected connections. In addition to developing an overarching framework and cross-cutting themes for the course, we helped each other elaborate effective ways of conveying our particular research projects—which had, for most of us, become lodged in the jargon-specific discourse of our professionalized and insulated disciplines—to first-year, first semester students. This was perhaps the most challenging and productive aspect of designing the course. Recently returned from two years of fieldwork in West Africa, and deeply mired in the ethnographic details and theoretical conundrums of my project, I had to figure out a compelling way to present my research that made sense to a chemist, a first-year pre-medical student, and perhaps a budding anthropology major. Although it is always challenging to present one’s research in an undergraduate course, doing so in a team-taught interdisciplinary seminar had the added pressure of condensing it into a 3-week module. I had to make difficult decisions about what nuggets could best illustrate a complex project, what could be (reluctantly) jettisoned, and how to relate my work to that of my co-instructors. Of course—as every ideal teaching experience should—which process eventually improved both my teaching and research efforts. It forced me to clarify my ideas, refine my thinking, and hone in on the truly unique aspects of anthropology and my particular line of research.

Again, the impetus for the ORDER program is to expose first-year students to active research projects from a range of disciplines and encourage them to develop their own research interests and capabilities. We used our projects as models, but we emphasized throughout that it was not important that they memorize the particular facts of our projects. We were not concerned if they became experts on Parkinson’s disease or language acquisition or West African rice cultivation
techniques, but rather that they capture the essence of how a research project is formulated and executed. The overarching goal was for students to understand how research concerns develop, how to pose good questions, and how to go about choosing and designing the most appropriate methodologies for exploring those questions. We designed the course to maximize active learning opportunities: we opted for intensive rather than extensive reading, conducted a range of experiments in the classroom, visited local research sites, and had students practice research techniques through homework assignments. For instance, I had students conduct mini-ethnographies of events and activities around campus. One of my co-instructors brought the class to the Yerkes Primate Research Center, where they got hands-on experience with high-tech lab equipment. Another instructor took the students to her lab, where they were able to record and analyze each other’s brain waves. In these settings, students were able to practice the research techniques they had learned in the classroom, as well as witness other researchers at work, thus demystifying the often-perplexing world of advanced academic research. Finally, as the culminating course assignment, each student developed their own potential research project and wrote a proposal as a final paper, applying the insights they had gained in class to their own projects.

Beyond the classroom audience, David Lynn established a relationship with the local public radio station in Atlanta. A producer from the station conducted audio (and in some cases video) interviews with each of the ORDER teacher-scholars, exploring the major themes of our research endeavors and asking us to explain our projects to a wider public broadcasting audience. These segments will be aired on public radio and television in the coming months. They will also be downloadable through a project linking public radio with the Georgia public school system, and public school teachers will be able to use them for various course curricula.

The strength of the ORDER program lies in its simultaneous benefits for different sectors of the university (and wider) community: it provides a unique and stimulating learning environment for undergraduates, an opportunity for graduate students to develop and refine their teaching skills and convey the key premises and outcomes of their own research to diverse audiences, and an all-too-rare forum for bringing together researchers from various disciplines across the sciences as co-instructors and colleagues.