Major Developments in Undergraduate Psychology

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 It's a field that is misunderstood by a lot of people. Practitioners are thought to be mind-readers and researchers are thought to be practitioners. But for a subject that is so misunderstood, psychology certainly is a popular major in the United States.

According to the most recent data from the U.S. Department of Education's (DOE) National Center for Education Statistics (2009), approximately 6 percent of the 1.5 million bachelor's degrees earned by students in academic year 2006-07 were awarded in psychology. After a period of slow growth during the late 1990s, the number of psychology bachelor degrees awarded rose 17.3 percent from 2001 to 2007 (National Center for Education Statistics, 2008). Psychology joins business, social science and history, education, and nursing as the nation's most popular majors.

Most of these psychology majors do not go on to graduate level study. In academic year 2006-07, over 90,000 bachelor's degrees were awarded in psychology, compared to roughly 21,000 master's degrees and just over 5,000 doctoral degrees. "We often teach like everyone is going to graduate school, but graduate school is the minority," according to APS Fellow and Charter Member Diane F. Halpern, editor of *Undergraduate Education in Psychology: A Blueprint for the Future of the Discipline*. Undergraduate psychology programs must grapple with this dual mission of preparing a small number of majors for post-graduate study while also preparing most majors for success in the job market, whether within the field of psychology or in other sectors.

Psychology's popularity extends to America's two-year and community colleges (see sidebar on page 21). Add into the mix the 150,000 or so students who complete AP Psychology in high school each year — as well as those who take high school courses in psychology without taking the AP examination — and it becomes increasingly clear that the study of psychology is a significant enterprise (College Board, 2009). Whether educating majors or non-majors, psychology departments large and small have an exceptional opportunity to harness the interest in the field, both to attract the best minds to research and to help build future generations of psychologically literate citizens.

The Large and Small of It

How a psychology department handles the demand for courses often depends on its size. At The Ohio

State University, the number of psychology majors is approaching 2,000. Past APS Board Member Joseph Steinmetz, who recently joined the school as Executive Dean and Vice Provost of Arts and Sciences, cautions, “If we are going to have 2,000 majors, we better fund the department accordingly.” For the psychology department at Ohio State, this has meant increasing access to advising and the employment of different teaching methods.

“Class size is certainly an important variable,” explains Halpern, who says teaching Introductory Psychology at Claremont McKenna College is one of the best parts of her job. Smaller class size allows for debates among students and more written assignments. “Larger classes certainly require more creative ways to get everyone involved,” said Halpern. Technology helps, such as the use of in-class buzzers, online discussion boards and student blogs. More traditional methods like small-group discussions and smaller discussion sections lead by teachers’ assistants remain common approaches in large lecture classes as well.

Large class size also makes it difficult to offer a laboratory component to students. The Colleges of Arts and Sciences at Ohio State tries to make out-of-classroom learning such as study abroad or service learning available to all students, regardless of major. “For psychology, the main thing students need is a scientific research experience, and that can be hard to provide,” says Steinmetz. He regrets that larger departments sometimes fail to deliver this component of an undergraduate education in psychology. Schools have begun to integrate online laboratories and online experiments into their curriculum in order to allow students to experience the scientific process they read about in textbooks. As technology continues to develop, psychology departments that make the best use of it will likely provide the best learning experience to students enrolled in large lecture courses.

At Washington and Lee University, every one of the roughly 60 psychology majors performs empirical research in a laboratory. “For us, it is just another class, albeit a very intensive class,” explains Tyler Lorig, Chair of Neuroscience within the Psychology Department at Washington and Lee. “What we do would be impossible at a larger school,” said Lorig, as each professor can only supervise a few students at a time.

Whereas larger departments often worry about too many students in a course, smaller departments must choose course offerings wisely and face the difficult task of spreading a faculty numbering in the single digits across all of the various sub-disciplines of psychology. The psychology department at Washington and Lee offers some courses only once every two years, which according to Lorig, requires careful planning and advising. Smaller size also affects hiring decisions. “When we’re hiring, we do hire people with specializations, but we try to hire people with broad interests or who have trained in various areas,” explains Lorig.

Whether a psychology department is large or small, faculty members see both the advantages and disadvantages of size. For Lorig, smaller size means the ability to get to know other faculty members, the chance to get to know students by teaching individuals in multiple courses, and less competition for resources. Members of large departments cite greater size as a catalyst for increased faculty resources. Though it may be harder for faculty members to get to know all their colleagues in a large department, greater size also means more expertise, more breadth in specialization, and additional opportunities for research collaboration. Some large departments, such as the psychology department at the University of Illinois at Urbana-Champaign, structure the faculty into divisions in order to create a smaller feel and

make the department more navigable for students. Often, each division within the larger psychology department has its own chair or director. As Sarah Grison, Director of Introductory Psychology at Illinois, notes, “We have divisions that are as large as psychology departments at some schools.”

No matter a department’s structure or size, what is clear is that psychology benefits from a unique position within a university. With the rise of neuroscience and the continued interest in traditional areas of psychology such as clinical and social psychology, Steinmetz believes the current trends of growth and collaboration with other departments will only increase. In his role as Dean, Steinmetz evaluates each department within the Colleges of Arts and Sciences based on its impact. “For psychology, that impact is huge,” he says, “both because the department teaches so many students and because the research covers such a wide variety of topics.”

Introducing Psychology to the Masses

Introductory courses — adorned with classic titles like Intro Psych, General Psychology, and Psych 101 — continue to be among the most popular undergraduate courses at universities. “Virtually everyone who goes to college takes a course in psychology,” explains Halpern. For the vast majority of non-majors, introductory psychology is the course of choice. Indeed, among those students who go on to graduate from college, introductory psychology is tied for the title of second most popular class, sharing the distinction with calculus and general chemistry and trailing only English composition. The students of introductory psychology courses are generally a young bunch; according to a nationwide study, 40 percent of students complete an introductory psychology course during their first year of college. Besides introductory psychology and English composition, which enrolls 67 percent of first-year students, no other course attracts more than 20 percent of first-year students (National Center for Education Statistics, 2004).

The popularity of psychology courses is partially due to the fact that they fulfill requirements for general education credits and other majors, including popular majors like nursing and education. Introductory Psychology at the University of Illinois, for example, satisfies requirements in general education, social science, and behavioral science. Grison, who oversees all Introductory Psychology sections, believes students also enroll in the class for other reasons. “There is a practical component to it,” says Grison. “Students have an inkling about how interesting psychology is in their everyday lives.”

Whatever the reason, over one million students enroll in introductory psychology courses each year nationwide. Last semester, approximately 2,000 students — spread across 33 individual sections — completed the course at Illinois. With so many students enrolling in Introductory Psychology, Grison understands why some outsiders may assume that course quality suffers. But the department has taken significant steps to provide a quality learning experience for students. By filling instructor positions with graduate students, the department increases the number of sections and limits class size. “We use the opportunity to make our graduate students effective teachers in higher education,” explains Grison. “It really is a silver lining.”

Grison and the graduate students measure student learning outcomes and improvement in order to identify how to provide the best introductory education possible. The psychology department requires at least one term-long appointment as an instructor of record for all graduate students. Those who volunteer to lead a section of Introductory Psychology also enroll in a rigorous graduate course entitled

Introduction to Teaching and Learning, which focuses on content and pedagogy. Although, the graduate instructors choose how to administer each section, part of Grison's role as Director of Introductory Psychology is to supervise, review, and advance each instructor's performance. The department thus seeks to improve undergraduate learning by improving graduate teaching. And, when student reviews of the instructors are tallied, Grison finds all the training and hard work pays off: two thirds of the graduate instructors make the department's excellent teaching list.

Back at Washington and Lee, where the total number of undergraduate students is about the same as the number enrolled in Introductory Psychology during just one semester at Illinois, there is no introductory psychology class. Instead, students choose from a group of four classes, each of which approaches general topics in psychology through a single lens. For example, Lorig's course entitled "Brain and Behavior" introduces students to behavioral neuroscience, but also examines topics in social, abnormal, and cognitive psychology through the perspective of behavioral neuroscience. Majors are required to take three of the introductory classes (and usually end up taking all four), but it is very common for non-majors to take just one. Lorig finds that seeing the same problems from multiple viewpoints helps majors to better understand what they are learning and relearning. And although non-majors are often surprised by the lack of a class with a recognizable name like Psych 101, they are usually happy with the structure in the end. Washington and Lee's approach allows professors to teach each area of psychology through the lens of their own specialty. "Everyone has to make some choices about what is going to get across to students," said Lorig. "With a broad survey, there is always a struggle with how broad. We narrow the focus, and find there is a value to the coherence that comes from this narrowed lens."

Though the Washington and Lee and Illinois approaches differ in how they present an introduction to psychology (at Illinois, each section shares a textbook, syllabus, and examinations and each instructor designs lectures, quizzes, and written assignments), they both emphasize a scientifically based foundation in psychology. Whether the Washington and Lee approach would work in a department as large as Illinois' is an open question. Lorig believes that it would, although for a school that trains graduate teachers through the introductory psychology program, it would certainly mean altering the way graduate students train to teach. What everyone agrees on is that with so many students enrolling in introductory psychology, the introductory course is an excellent opportunity to create a core of psychologically literate and knowledgeable adults who will go on to be the educated lay consumers of the findings generated by psychological science research.

Psychological Literacy

A psychologically literate person understands the links between what she learns in a psychology course and everyday life. (See Halpern, 2010, and Morton Ann Gernsbacher's May 2007 *Observer* Presidential Column). She is empowered to peruse provocative news headlines with a skeptical eye, to decide between different approaches to parenting, or to question whether there is data supporting the claims of a politician, an employee, or a friend. Perhaps most importantly, a psychologically literate person understands psychology's core jargon and controlled research methodology.

Unlike many other academic subjects, students of psychology are able to make strong connections between the concepts they learn in class and the relevance to their everyday lives. The hope is that this mass of students will become psychologically literate citizens who can use their knowledge to understand and affect policies, to understand media coverage of psychology, and to improve the way

they live their own lives.

Undergraduate psychology departments have a natural opportunity to take center stage in the teaching of psychological literacy. By channeling undergraduates' well-documented interest in psychology and by effectively managing the challenges that come with larger size, these departments have the power to educate psychologically literate citizens for generations to come.

It may be only a matter of time before psychology majors stop fielding questions about the paranormal and psychoanalysis and start fielding questions about the actual psychological science they learned about in class.

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