

William S. Altman, Ph.D., Research Interests: The Scholarship of Teaching and Learning (SoTL)

My major research interests have long centered on the Scholarship of Teaching and Learning (SoTL), investigating it from several different directions. Currently, I'm focusing on two areas.

The first grew out of my career-long efforts to promote inclusion and diversity through improved educational access for marginalized groups. I investigate barriers to student success and ways to surmount those challenges. Right now, I'm looking at the needs of students who are underprepared for college, the effectiveness of remediation programs, and practical options that could be implemented at the department level to help these students thrive.

The second major area of my research is grounded in an emerging theoretical approach that's known as "evidence-informed teaching practices." Many teaching methods that are designated as "best practices" are actually tested under highly controlled conditions that don't reflect the messy and creative realities of classroom instruction. Sometimes such techniques fail in actual classroom use, and these failures may cause some instructors to abandon these approaches because they don't have the time or ability to experiment and make them workable. Or instructors may become skeptical of all research-based teaching techniques.

I'm developing complementary field research, related to my work on the American Psychological Association's Introductory Psychology Initiative, evaluating which of these promising teaching techniques work in real classrooms, and under what conditions. It's a data-driven approach (hence "evidence-informed") that recognizes the range of teaching environments and challenges faced by instructors and students. The goal is to promote a suite of effective teaching practices that are appropriate to diverse populations and a wide range of class sizes and compositions, and that support the many different teaching styles instructors prefer, encouraging teachers to adopt the ones that are best for them.

The next step in my research program, which I hope to undertake immediately, is to greatly expand my work in these areas, partnering with interested faculty in other disciplines, while continuing my collaboration with psychology faculty and professional development staff in centers of teaching excellence at other institutions.

In all of these efforts, I'm committed to including undergraduates as part of my research team, mentoring them from the inception of projects through conference presentations and manuscript submissions. I have always encouraged students to engage in original research, even when that required extra effort on my part and creative means to secure the resources to support it. (In fact, my commitment to student research is also demonstrated in my teaching; all of my students engage in hands-on research, including those in Introductory Psychology.)

My current work with the American Psychological Association's *Introductory Psychology Initiative* (IPI) will provide ample opportunities for students to engage in the sort of SoTL research I've described, with projects that may include:

- Evaluating the success of particular teaching techniques (e.g., group work, enhanced lectures, flipped classrooms, hybrid courses), to provide ecological validity to what is known about best teaching practices;
- The development and evaluation of assignments designed to address the IPI's recommended Student Learning Outcomes; and
- Participating in a national project to assess the long-term effects of the introductory psychology course, specifically, students' ongoing educational, professional, and personal success after separation from the class. This last area is of special concern to the IPI because we envision Introductory Psychology as a transformational course that can enhance students' critical thinking, media literacy, and general life skills.

The current call for publishable replication studies also offers many opportunities for student research in a wide range of areas that complement my SoTL-based program. These well-defined projects would teach important research skills and provide potential opportunities for publication and presentation, while also contributing to the advancement of our field. In addition, these more well-defined opportunities may encourage participation by students who might otherwise have been too intimidated to undertake original research.

Curiosity drives research. One of my primary goals in mentoring undergraduate researchers is to spark that curiosity, to help them make the leap from technician to scientist, to experience the need to know more and to share that knowledge. Working together, students, colleagues, and I can learn and contribute much, and can make our world a better place. And that is the essence of my research agenda.