

I enjoy teaching psychology because the inner workings of the mind, especially language, are biological, social, and cultural phenomena that touch all of our lives, yet many students have never thought of them as domains that can be studied scientifically. Language, along with just a handful of other characteristics, is unique to human beings, and as one of the components of cognitive science, psycho linguistics provides a window into the human mind. As a teacher and scientist, I am fascinated by the way in which humans extract information from the environment, transform it into knowledge, and transmit it to others. By appealing to students' natural interests in human behavior and the world around them, I can guide them through a thoughtful and empirical reflection upon their inner mental life and the ways in which we interface with others and the world.

I have taught introductory and advanced courses to both graduate and undergraduate students. In courses like *Introduction to Cognitive Science* and *Introduction to Linguistics*, I familiarize students with the major questions that define these fields, and introduce the vocabulary and formalisms that are used to answer them. In advanced courses like *Cognitive Psychology* and *Psycholinguistics*, students dig deeper into the process of research and formulate questions of their own. I have also designed topical courses, such as *Music Cognition* and *Psychology of Improvisation*, in which students apply theories and methods to a central question in an extended case study of cognition. In the future, I hope to develop more such courses which focus on interdisciplinary, lesser-studied, and cutting-edge topics, such as the relationship between language and music, and cultural and social aspects of perception and cognition. I've found that each type of course presents its own unique challenges, but that a key to success in each is to carefully design the course around the needs and prior knowledge of the students, but to be ready and willing to adapt the course and instruction as needed.

As a member of a university community, I must consider how my teaching fits into the broader context of students' general education, especially for students who are not majoring in the field. Each of my courses emphasize important academic skills necessary for study of any aspect of the mind: *analyzing* human behaviors, in a rigorous and systematic way, *communicating* scientific ideas and methods, *critically assessing* the results of scientific research, and *synthesizing* many separate pieces of information to reach a conclusion. My syllabi make reference to these goals as well as the course-specific learning goals. The learning goals depend on the intended audience. For example, undergraduate majors need to learn the vocabulary and tools needed to navigate within the field. I focus on helping non-majors become literate consumers of scientific news about these subjects, which entails the development of critical thinking skills. I aim to help graduate students become active scholars by identifying avenues of research, practice the scientific method, and communicate about the discipline.

Structuring a course based on these goals is a foundation, but the most important goals are defined by students; I ask students why they are taking the course and what they hope to learn from it. This input allows me to build on existing knowledge. I ask for feedback early and often to check whether the activities, assignments, and workload are meeting their needs, or whether there are changes that would aid their learning. Because each student's needs are unique, I design varied activities to achieve a balance among learning styles; this is especially important in mixed classes of majors and non-majors, or graduates and undergraduates. Although the course content varies, my course structure follows a similar format: student *preparation* → *interaction* → *reflection*.

*Preparation* consists of students' individual work with course material which introduces the lesson, accompanied by an assignment (such as answering targeted reading questions) designed to help students actively digest the material and be ready to engage in class. Although some students have complained about pre-class work, many more have admitted that they would not have been as well-prepared for class without it. This student preparation helps me anticipate problems and adapt my lesson plan when students submit their questions online before class. In advanced classes, I give students responsibility for presenting course material; I find that giving such responsibility to students motivates them — not through fear, but by increasing their investment in the success of the lesson and by making them accountable to their peers.

My preferred method for creating *interaction* is guided discussion, because I can develop a rapport with students in which they can share their thoughts and questions about the topic, I can probe them with Socratic questions, and students can learn collaboratively from one another; in fact, I am often led to insights about the material that I would not have had myself through discussions with students. In larger classes, this open-ended discussion is not always feasible, so I break up lectures with small group or paired activities, such as

solving problems or participating in a demonstration, which still permit some level of interaction and discussion. Discussion is the course component most often mentioned by students as that which most helps their learning. An important consideration is maintaining a balance between group and individual work. Although some students may not enjoy collaboration, it is an indispensable part of science, and so I try to include both individual and group components in each course.

Group projects typically encounter several pitfalls, including procrastination and unequal effort. One solution I have employed is a topical wiki project, which has several advantages over a traditional group project, because (a) it allows me to monitor progress and track individual contributions to the group; (b) the wiki is inherently collaborative, encouraging students to revise one another's work; and (c) because each wiki page is centrally linked, groups can provide feedback to one another. Students' grades are based on both individual and group assignments, thus making each student accountable and ensuring the group makes timely progress. The wiki format allows content to be recycled in future iterations of the course, thus building a topical resource for current and future students.

The *reflection* phase requires students to integrate course concepts with learning goals and their own experience. Throughout the course, reflection includes reaction papers or exercises which require students to go beyond what was discussed in class. This process allows me to assess whether students accurately understood the lesson, and what they took away from it.

This *preparation*  $\rightarrow$  *interaction*  $\rightarrow$  *reflection* process forms a loop, as reflection upon the preceding lesson feeds into preparation for the next. Thus, I design the arc of the assignments for the entire course to flow from one lesson to the next, advancing the course themes incrementally to higher levels of understanding. For example, in courses in which I emphasize the goal of evaluating and synthesizing research to answer a scientific question, I sometimes assign an annotated bibliography project instead of a term paper. The numerous academic skills required to write a successful paper can cause some students to lose sight of the central goals of the project, and limitations of time often necessitate a trade-off between depth and breadth. The annotated bibliography project focuses effort by asking students to collect sources related to a central research question and provide a summary and evaluation of each. This bibliography is the 'skeleton' of a literature review, and could form the basis for a full research paper. By using a format which can be easily subdivided, I can assign incremental due dates and link project milestones with key units of the course. In advanced courses, students are expected to make the leap into independent inquiry and research. This, too, follows an incremental path, beginning with the examination of primary research materials as a model and progressing to writing research papers independently.

I attempt to follow this *preparation*  $\rightarrow$  *interaction*  $\rightarrow$  *reflection* loop in my approach to teaching. Preparing to teach is fundamental to success, but demands continuous interaction with students during the learning process, and reflection upon my methods in order to improve them. This is why I ask my students whether they are achieving the intended learning goals, and what aspects of the course help or hurt their progress. I am not afraid to make changes for the next day or next term, because I know that a key to a successful relationship between instructor and student is mutual trust and accountability. My students tell me that their favorite part of class is when what we are learning causes them to look at their own experience in a new way and to make connections to previously unrelated interests. I know I have taught successfully when students can not only articulate what new knowledge or skills they have acquired, but can take this knowledge and apply it creatively to the wider world.

## Selected Teaching Scholarship

**Bradley, E.D.** Reading and researching paperlessly. *Teaching and Learning with Technology 101*, Penn State Lehigh Valley.

**Bradley, E.D.** (2013). Using persistent wikis as a pedagogical resource. In Ferris, S.P. and Wilder, H. (Eds.) *The plugged-in professor: Tips and techniques for teaching with social media*. Oxford: Chandos.

**Bradley, E.D.** & Emerick, B. (2011). Teaching your own course: Freedoms, responsibilities, and methods. *Annual Conference for Graduate Teaching Assistants*. University of Delaware.

**Bradley, E.D.** & Evans, L.M. (2011). Engaging students in academic writing with annotated bibliographies. *Proceedings of the Lilly Conference on College and University Teaching and Learning*, Washington, DC.