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Foreword

Charles L. Brewer

Furman University

Mark Hopkins (1802-1887) graduated from Williams College in Williamstown, Massachusetts, in 1824. He later taught philosophy at his alma mater and served as its president for 36 years. A skillful, popular, and respected teacher, Hopkins used the Socratic method as his principal pedagogical technique. One of his former students and a future President of the United States, James A. Garfield, is said to have remarked that the ideal college is Mark Hopkins on one end of a log and a student on the other. This approbation may well be the ultimate accolade for engaged learning.

Throughout the history of education in the United States many experts have stressed the importance of engaged learning. As editor Richard L. Miller points out in the informative Introduction to this e-book, John Dewey and William James were early advocates. During the last 20 years, engaged learning has become an even more prominent facet of education in psychology, especially in undergraduate programs. Engaged learning is an essential component of recommendations from the national conference sponsored by the America Psychological Association (APA) and held in 2008 at the University of Puget Sound in Tacoma, Washington (see Halpern, 2010). A significant outcome of this conference is a document titled “Principles for Quality Undergraduate Education in Psychology” that was approved by conference participants. One of the principles specifically mentions “active engagement.” These principles became official APA policy in 2010: (http://apa.org/education/undergrad/principles.aspx).

This latest e-book in the impressive series published by The Society for the Teaching of Psychology (Division 2 of the APA) provides compelling evidence for increasing emphasis on engaged learning. It is a valuable resource for teachers who seek creative and successful techniques to foster engaged learning inside and outside the classroom. It contains a plethora of specific activities, exercises, demonstrations, and additional resources for doing so in almost all psychology courses.

Although there is some understandable overlap in coverage, the five major sections are: (a) social and developmental; (b) cognitive processes; (c) biological processes, research, and the history of psychology; (d) abnormal psychology and personality; and (e) activities that can be used in more than one course.

Not all the information concerns substantive content of the discipline as reflected in course titles. For example, there are suggestions for teaching ethics, APA-style writing, happiness, diversity, peace and war, nonverbal communication, service learning, and critical thinking. In addition to a description of how authors use and assess their methods and techniques, each chapter contains numerous related references.

An unusual feature of this book is that each chapter includes an annotated bibliography that provides many additional resources. If teachers read a chapter in this book, the annotated bibliography, and the list of references at the end of it, they will have more information about a particular activity, exercise, or demonstration than they will probably ever want or need.

The editor as well as several section editors and chapter authors are teachers of recognized excellence. Many of them have received local, state, regional, or national teaching awards. Their reputations alone will prompt me to try some of their suggestions for engaging students more actively and effectively in the learning process. Most of their suggestions will galvanize teachers to encourage more students to learn for the sake of knowing rather than merely memorizing isolated facts to ensure a good grade on the next examination.

In short, neophytes and experienced teachers will find in this book numerous ways to improve their teaching by engaging their students. My advice is clear and concise: Choose it and use it.

Reference

Introduction

John Dewey is arguably the most influential thinker on education in the twentieth century. His educational theories were first presented in My Pedagogic Creed (1897) in which he contended that the most effective teaching techniques are based on experiential education, which he described as intentional programming designed to teach through experience. Dewey believed that in order for education to be most effective, the content should be presented in a way that actively involves the student and allows him or her to relate the information to prior experiences, thus deepening the connection with the new knowledge. Dewey’s ideas went on to influence many other experiential models, including Project Based Learning that puts students in the active role of researchers. Many of Dewey’s ideas are at the heart of the latest educational initiative: promoting student engagement. Student engagement can be defined as a students’ willingness to actively participate in the learning process and to persist despite obstacles and challenges. While student engagement can include activities well beyond the classroom, including extra-curricular learning opportunities, the focus of this book is on the “micro” level—what happens in and immediately surrounding class.

Purpose of the Book

In his Talks with Teachers, William James suggested that while psychology is a science, teaching is an art. He further suggested sciences do not generate art directly out of themselves but require an intermediary inventive mind to create teachable moments. To be good teachers, James believed that we need the “happy tact and ingenuity to tell us what definite things to say and do when the pupil is before us. That ingenuity in meeting and pursuing the pupil, that tact for the concrete situation are the alpha and omega of the teacher's art” (James, 1899, p. 9).

The purpose of the book is to provide teachers of psychology access to teaching techniques that epitomize “happy tact and ingenuity.” The principle influence that teachers have on student behavior occurs in the classroom since, as noted by Erickson and Strommer, (1991), today’s students spend relatively little time studying outside of class. When college teachers think about student engagement, they suggest that engaged students really want to learn, exceed expectations, and demonstrate passion and excitement (Barkley, 2009). In this book, the reader will find a host of ideas that should help create passion and excitement in the classroom.

Organization of the book

In this book, the authors describe engagement techniques that address topics within the context of a particular course in psychology. Each chapter provides an annotated bibliography of activities published elsewhere as well as a new unpublished activity that the author has used. The annotated bibliography outlines exercises and demonstrations that enhance student engagement relevant to the topic area that have been published in TOPS, the Handbooks for Teaching Psychology, as well as activities recommended in various Instructor’s manuals and those available through OTRP. The book is divided into five sections. The first section describes activities that can be used in the social, developmental, environmental, organizational, and cross-cultural psychology. The second section describes activities that can be used to teach sensation and perception, cognitive psychology, intelligence, language and related topics. In the third section, we offer teaching techniques relevant to biological psychology, research methods and related topics, as well as history and systems courses. Abnormal behavior, personality, gender and adjustment are all addressed in Section 4. Section 5 is devoted to activities that can be used in more than one course and include topics such as diversity, critical thinking, positive psychology and APA style writing.

Section 1. Social and Developmental Psychology

In her chapter, Maya Khanna describes an activity for courses on adulthood and aging. In this activity, students design a retirement and care plan for a fictional older adult or couple entering retirement based on the health, financial, and family situation of the character(s). Working in small groups, students design these plans while drawing help from external resources such as local assisted living centers, and agencies on aging. When college teachers think about student engagement, they suggest that engaged students really want to learn, exceed expectations, and demonstrate passion and excitement (Barkley, 2009). In this book, the
methods for engagement. The authors review over 80 published articles on various ways to engage students in child or adolescent psychology courses. They then select 16 exemplary articles to annotate. Finally, they provide a table summarizing these articles and an additional 10 articles they deemed noteworthy. Finally, they provide a critique of past research and suggestions for future research.

It is often very difficult for people to openly discuss their thoughts, feelings, and beliefs about death. Lisa Bauer’s chapter describes classroom techniques that can be implemented in a death, dying, and bereavement course. The chapter describes a teaching activity that increases students’ knowledge about organ donation while encouraging students to explore and share their beliefs. The last part of the chapter includes an annotated bibliography. The described activities capture the attention and interest of students, encourage students to become active participants in the exploration and discussion of death, and educate them about death, dying, and bereavement.

One of the advantages of teaching group dynamics is that the subject matter itself can be created and demonstrated within the confines of the classroom. The explicit goals of group-process classes vary from an emphasis on experiential learning to a focus on theory and research. No matter what the approach, adding group activities to the class will increase students’ engagement, comprehension of concepts, and their skill when working in-group settings. Don Forsyth’s chapter provides the materials needed to carry out one such activity, the Task Challenge activity. He also provides a series of creative activities that enterprising instructors have developed to teach students about groups.

The chapter by Hendricks and Huss first describes an active learning activity in which a voir dire, or jury selection process, can be utilized as a standalone class activity or in conjunction with a mock trial. It offers detailed instructions on how to execute the voir dire within a classroom setting and discusses many of the advantages and limitations involved in enacting the voir dire. The activity involves students in an active learning activity and encourages independent critical thinking and provides a realistic depiction of psychology within the legal system. In addition, the article provides an annotated bibliography of fifteen different activities that can be used within psychology and law related classes.

In Harnish, Bridges, Denillo and Flaherty’s chapter, the authors provide readers with materials, demonstrations, and other activities designed to engage students in an applied social psychology course. They describe a variety of in-class and service-learning projects that facilitate the acquisition of knowledge and skills undergraduate students need in order to be successful in their academic and professional careers.

Environmental psychology is the study of human interaction with the built and natural environment. Paul Bell and his colleagues describe a series of in-class and field exercises and demonstrations, and longer-term assignments, intended to illustrate relevant concepts and processes. Topics include the full range of environmental issues, including perception, attitudes, and cognition; personal space, territoriality, and crowding; as well as sustainability and saving the environment. Many of the exercises are directly relevant to the college/university campus, including issues of campus history, social interaction, student retention, and functional and dysfunctional design. The authors have used these exercises in their own classes and have modified them through the years based on student feedback and changing times. Relevant details, handouts, and response scales are provided on a linked website.

Industrial/Organizational (I/O) psychology courses involve teaching students how to use psychological science in an applied field. The chapter by Zinn and Smiley introduces application activities for engaging students in an I/O Psychology course. In the chapter, they describe a series of activities they currently use in our I/O course to promote engagement with the material, focusing on the job of a college professor. Following these examples, they provide an annotated bibliography for I/O instructors hoping to encourage active participation by their students.

Cross-cultural psychology is an exciting field that allows students to examine the underlying reasons for psychological diversity, the links between cultural norms and behavior, and how human activities are influenced by cultural forces. Anderson and Miller review exercises that explore the relationship between culture and basic psychological processes, human development, health, emotional expression, abnormal behavior and social processes. They also describe exercises that demonstrate gender differences related to cultural factors and research methods used in cross-cultural psychology. An original exercise using social networking to explore cultural differences is provided.

Section 2. Cognitive Processes

Cindy Gibson provides an annotated bibliography of activities and demonstrations that are easily and affordably implemented in the classroom on a variety of topics in Sensation and Perception. The author has tested each of the activities in this
The chapter starts with two original activities and student feedback and measurable learning outcomes. The chapter starts with two original activities and other annotated activities are included with suggestions for expansion and modifications.

In their chapter, Carroll and Keniston identify challenges in teaching a course in cognitive psychology. These challenges include the abstractness of the material, the quantitative nature of the discipline, the role of cognition in the history of psychology, and the difficulties in presenting a unified theme. They describe a new activity that can be presented on the first day of class that engages students, introduces a compelling cognitive phenomenon, and provides material that may be examined again in subsequent class periods. They also review a selection of existing publications on how to engage students in cognitive psychology using diverse methods such as student journals, television commercials, and LEGO bricks.

Motivation and Emotion courses introduce students to the physiological, cognitive, and environmental forces that affect human and animal behavior. After completing a motivation course, students should have broad understanding of the complex interaction between biology, culture, and psychological processes that induce our actions, feelings, and thoughts. In his chapter, Alan Hughes shares demonstrations and activities corresponding to the major concepts typically covered in a Motivation and Emotion course. These activities include topics of aggressions, homeostatic processes, dreaming, addiction, fear, stress and health, sexuality, and social processes.

As student engagement is a strong predictor of academic performance the purpose of Aaron Richmond’s chapter is to assist instructors who teach educational psychology in improving the learning experience of their students. After an exhaustive review of the literature, 14 exemplary articles that centered on methods to engage students are annotated. Next, the author provides a table describing each article’s topic, activity type, was the method assessed, and were learning materials provided. Finally, Richmond provides a critique and suggestions for future research.

Esping and Plucker offer suggestions for in-class activities, homework assignments, and resources that psychology and education faculty can use to engage students in learning about the complex and controversial topic of human intelligence. The selected activities can stand alone or be used as preliminary steps in longer pedagogical processes. Careful attention is paid to the needs of faculty in schools and colleges of Education, who are preparing future teachers to understand the relevance of intelligence theories for their future classroom practice.

Carroll and Pinnow identify challenges in teaching a course in the psychology of language (psycholinguistics). Many students take language for granted, and hence it is important to increase students’ awareness of this topic. In addition, students may bring a variety of academic backgrounds into a psycholinguistics course and this diversity poses challenges for instructors. The authors present a new activity that enables students with different backgrounds to explore psycholinguistic phenomena in diverse ways. The chapter also includes a review of existing publications on how to engage students in the psychology of language.

Section 3. Biological Processes, Research and the History of Psychology

Joe Benz presents online video resources to illustrate many principles in animal behavior. The topics illustrated are very often the ones that students have the most difficulty comprehending. Thus, rather than an exhaustive list of resources, those chosen illustrate ideas that the students seem to have the most difficulty understanding. Thus, there are several resources for introducing the idea of evolution. This is necessary, because, to paraphrase, nothing in animal behavior makes sense except in the light of evolution.

Lloyd, Shanks and Robertson’s chapter details a two-fold approach to engaging students in neuroscience courses. It contains an annotated bibliography of several activities that provide integrative, hands-on learning experiences in the classroom or the classroom laboratory. In addition, it contains two novel approaches to actively engaging students in a neuroscience course: (1) a set of out-of-class exercises, in-class discussions, and a neuroanatomy laboratory adaptable to any neuroscience course; and (2) a novel, process-oriented, neuropsychopharmacology experimental design appropriate for a laboratory neuroscience course.

Frank Ferraro’s chapter of engaged activities for physiological psychology focuses on ways to enhance student understanding of how the brain works. The classroom/laboratory ideas represent creative ways to explain core material related to the structure and function of the nervous system. Both formal and informal assessments indicate the activities are effective at improving student learning.

Bill Lammer’s chapter provides sources that outline general pedagogical strategies for a Research Methods course that promote active learning. Some
focus on activities to strengthen skills such as writing and being a critical consumer of research information. Others provide specific engaging activities designed to help students learn a particular research design concept. The annotated bibliography included in the chapter focuses on published journal articles with data indicating the positive impact the activities have on student learning.

Actively engaging students during a statistics class may be one way of addressing the prominent fear of statistics with which many instructors are familiar. In their chapter, Zinn and Smiley identify ways that statistics instructors can actively engage their students by describing (a) using applets for demonstrations, (b) incorporating current news articles pertaining to psychology, and (c) a data collection project. They then provide an annotated bibliography for instructors, describing empirical articles that may be useful in the classroom.

Psychometrics courses introduce students to the concepts central to psychological assessment. Many students perceive the overall topic of psychometrics to be dry or irrelevant to their professional goals. Fighting against students’ fear, anxiety, or dislike of statistics, instructors must use strategies to engage students and actively involve them in the learning process. Mandernach and Hackathorn discuss strategies for (a) analyzing psychometric information in the popular media, (b) evaluating the validity of online tests, and (c) constructing effective assessments.

History of psychology classes are disappearing in American universities. To counter this trend, Doug Woody’s chapter presents several engaging activities to create interest in history of psychology classes. The chapter opens with a previously unpublished demonstration that provides instructors with tools to realistically and ethically present Watson and Rayner’s (1920) classic Little Albert study. The chapter then presents a series of peer-reviewed demonstrations across several categories, including debates, role-playing, academic genealogies, celebrations of important dates in the history of psychology, and demonstrations of historical research apparatus. These engaging activities can help instructors bring history alive for their students.

Section 4. Abnormal Psychology and Personality

Students bring an intrinsic interest in the content to an Abnormal Psychology course, but they also bring existing stigmas against the mentally ill and mental health professionals. In his chapter, Anton Tolman outlines transformative experiences, which begin with helping students understand the professional foundation of this field, the application of concepts and theories, development of core intellectual skills, self-awareness as a learner, and helping students recognize and combat stigma. Course activities should engage students in ways that challenge their existing framework on these topics and promote self-reflection, social competencies, and critical thinking.

Health psychology is the study of biological, psychological, and social factors in physical health and illness. In Robin Anderson’s chapter, engaging learning activities are reviewed that highlight these multiple levels of analysis and understanding. Activities range from in-class demonstrations to semester-long projects, and include both individual and group work. Activities promote critical thinking and a focus on research methodologies specific to issues in health psychology. In addition, many activities encourage students to apply knowledge to themselves and the community. The direct relevance and application of these projects make them particularly engaging for students.

Students generally enter clinical psychology courses excited about the material and field. As a result, relative to faculty teaching other courses in psychology, clinical psychology faculty can focus on identifying strategies for keeping students engaged, expanding and focusing their interest, and developing higher order intellectual skills. Jeanne Slattery’s chapter provides an annotated bibliography of teaching exercises to meet these needs.

Rayne and Patterson provide a wide range of activities that represent best practices to teaching Human Sexuality in the college psychology classroom. The introduction includes a short framework for understanding how to implement a curriculum on a topic that is both deeply personal to most students and often highly political in nature. In order to provide a high level of student engagement with the topic, we included activities that call on both the students and the professor to work in groups and to bring in outside source material in order to personalize the content.

Teaching the psychology of religion can take many forms. Ladd and Nielson’s chapter outlines multi-media, internet, and human resources that can support a wide variety of options. In addition, it provides a specific example of a course structure that encourages students to think about how the psychology of religion has points of contact with an array of other disciplines.

Marianne Miserandino’s chapter presents an original activity using humor to teach students about unconscious processes as an introduction to the theories and techniques of Sigmund Freud. She also provides an annotated bibliography of some usual and unusual activities to teach topics in personality
psychology including achievement motivation, the five factors, self and identity, genetics, narrative, critical thinking, and much more.

Isabelle Cherney’s chapter presents examples of active learning activities and demonstrations as well as how these experiential learning exercises are adapted to the course goals and objectives in a psychology of gender course at a Midwestern University. The chapter provides descriptions of in-and out-of-class activities as well as resources that facilitate student learning.

How do people cope with the psychological challenges of daily life in our contemporary world? How do individuals navigate modern life effectively in order to successfully deal with issues including stress and coping, interpersonal communication, friendship and love, marriage and intimacy, expressing sexuality, careers and work, and physical health? Addressing these questions is the focus of the Psychology of Adjustment course. Dunn, Yost-Hammer and Weiten discuss reasons for teaching the Adjustment course, provide original activities for students to learn about adjustment issues, and close the chapter with an annotated bibliography of text books and articles on the psychology of adjustment.

Section 5. Activities that can be Used in More than One Course

Undergraduates can benefit from studying professional ethics by exploring their own morality, becoming better consumers of professional services, and being well-prepared for the ethical aspects of their internships and other applied experiences.

Mitch Handelsman’s chapter presents several approaches to teaching ethics and five principles for instructors to consider when preparing to teach ethics, including the importance of (a) students’ backgrounds, (b) positive approaches, (c) supportive strategies, (d) experiential methods of learning, and (e) preparation for life-long learning. The chapter presents several activities that actualize these principles, and includes an annotated bibliography.

In her chapter, Lynn Bruner suggests that engaging students in APA-style writing relates to three emphasis areas. Through developing a trusting relationship with the professor, students can more fully enter the anxiety-producing developmental process of learning psychological writing. Through participative development of a classroom culture of hard work and active practice, students master the necessary writing skills and develop positive expectancies that their efforts are meaningful. Finally, through learning to follow the steps of proofreading, revising and editing, they develop discipline and become self-correctors. A high level of personal engagement by the professor is necessary to create a successful developmentally-based APA-style writing class.

Dunn, Beard and Fisher provide teachers with ideas and approaches for teaching about happiness. Following a brief history of positive psychology, they review constructs routinely linked to or cited as key components of happiness. They then consider various factors or “correlates” that do (but more often do not) predict people’s happiness. Nine activities encouraging students to explore happiness and related psychological states are described. The authors then consider whether and how people can be happy all the time, closing the chapter with instructor resources on happiness and positive psychology, including texts, trade books, and articles appropriate for student reading assignments.

In their chapter, Cathey and Ross first discuss the numerous ways in which psychology students can benefit from exposure to human diversity in their psychology courses. They then describe their use of an online message board that allows American and Chinese psychology students to discuss course material together, and they discuss how such student exchanges can allow students, even those in relatively homogenous classrooms, to reap some of the rewards of exposure to diversity. Finally, they present an annotated bibliography of classroom activities designed to introduce diversity-related topics in psychology classes.

Although psychology has long dealt with issues of peace and war, this information has not always been integrated into the curriculum. The chapter by Woolf and Hulziger includes both exercises for immediate classroom use as well as bibliographic resources. Teachers can use this information to both introduce issues of peace and war into traditional psychology courses or to create topical courses. The material is this chapter draws not only on the psychological literature but also teaching literature from related disciplines (e.g., Holocaust Studies and Peace Studies). As peace and war are potentially political topics, the authors include recommendations aimed at avoiding potentially volatile situations.

Following an introduction about the relationships between verbal and nonverbal codes that comprise almost all human communication, Don Stacks and his colleagues provide sources for each of the nonverbal subcodes. These subcodes represent how we communicate through space and territory, our physical appearance and dress, kinesics, the voice, the use of time and olfaction.

Paul Smith’s chapter is a review of a selection of published classroom activities for developing students’ critical thinking skills. Seventeen such activities are described, each with a specific learning goal. The chapter also includes a description of a
new activity designed to introduce students to the empiricism-rationalism divide and to illustrate the need to back up good reasoning with sound evidence.

References


Acknowledgements

I want to thank our authors for their generous and thoughtful contributions to the e-book and our section editors for their careful critiques of the authors’ work. The authors have had first hand experiences, and in their chapters they share their successes as well as the challenges in implementing and assessing a wide-range of techniques and opportunities to encourage student engagement in psychology courses. Our goal is that the reader will be able to use this e-book in a very practical way to answer questions, generate ideas, and adapt the information to their special circumstances. I hope you will find that this book achieves its goal.

Richard L. Miller
University of Nebraska at Kearney
May, 2011
## Section 1. Social and Developmental Psychology

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How Engaging Are You? A Review of Teaching Methods to Engage Students in Child and Adolescent Psychology Courses

Aaron S. Richmond and Lisa Kindelberger Hagan

Metropolitan State College of Denver

Is student engagement really that important? According to Rumberger (2004), when students are disengaged, they have significantly higher rates of quitting school. Conversely, when students are engaged, they have higher retention rates, enjoy learning, transfer what they learn, and have a deeper conceptual understanding (Dowson & McInerney 2001; Hancock & Betts 2002; Lumsden 1994; Voke 2002). Despite the fact that research demonstrates the importance of engagement, professors continue to employ teaching strategies that lead students to become bored and disenchanted with the course. Therefore, the purpose of this chapter is to assist educators in improving classroom instruction by reviewing and synthesizing past research on ways to engage students in child and adolescent psychology courses.

We reviewed over 80 published pedagogical articles on child or adolescent psychology. From this list, we chose 16 exemplary articles to annotate. We provided a table summarizing these articles and an additional 10 other articles that we deemed noteworthy (see Table 1). Finally, we provided a critique of past research and suggestions for future research.

Table 1. Summary of Articles on Engaging Students in Child and Adolescent Psychology Courses

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Note. “All” in the category of developmental period denotes infancy, child, and adolescence. “All” in the category of developmental area denotes social/emotional, cognitive, physical/biological, and language development. (*) denotes articles that were not fully annotated.
Annotated Engagement Articles

As indicated previously, there are dozens of published examples of methods to engage students in child and adolescent psychology courses. For this review, we focused on the 16 most engaging and meaningful activities. These articles represent seven different general ways to engage students: observation, role-playing, experiential learning, films, discussions and debates, and writing assignments.

Engagement by Observing

Course material is illuminated, clarified, and strengthened when students can observe children and adolescents demonstrating developmental concepts. For example, students can be brought into the classroom in the form of a panel (e.g., Vacha-Haase, 1996), or students can also be asked to make their observations outside of the classroom and document those experiences (see Balch, 1986; Clements, 1995; McManus, 1986a, 1986b; Ormrod & Carter, 1985; Poole, 1986). Below are two exemplary articles incorporating observation in a child or adolescent psychology class.

Semester-long observation of adolescents. McManus (1986a) created an assignment that asked college students to develop a relationship with an adolescent through weekly out-of-class activities. The instructor recruited adolescent volunteers through local schools. Adolescents who wanted to volunteer filled out a card with their contact information. College students then called them and set up a time to meet the adolescents and their parents at their home. Students obtained written informed-consent from each adolescent’s parents and from the adolescent during the first meeting. Throughout the semester, the college students kept a journal that described their observations and impressions of the adolescent and how the adolescent reflected developmental themes learned in the class. Qualitatively, students reported increased motivation for learning and that the exercise helped to make abstract course concepts more concrete.


In-class child panel. Four times during the semester, Vacha-Haase (1996) brought in four to five children from the age group discussed in class to give concrete examples of theoretical course concepts. Mothers and fathers of the children, if the children were young, or the children themselves, if the children were older, brought toys, drawings, or clothing to class, to demonstrate the particular stage of development the children were in. Vacha-Hasse gave examples of topics that parents of panel members could discuss for each age group and activities that the children could demonstrate for each age group. After each panel, students wrote a paper relating their classroom observations to information learned in class. Although not empirically assessed, the instructor anecdotally reported students were better able to relate course concepts to real life examples.


Engagement Through Role-Playing

Finding children and adolescents to observe can sometimes be challenging. Some of the challenges include difficulty knowing and/or recruiting appropriately aged children and dealing with the social desirability effect; children in the classroom often behave differently when 20-75 strangers are looking at them than they might normally. One way to address this issue is to have students role-play in class as children. These two articles demonstrate different ways to role-play in a child and adolescent psychology course.

Simulated parent/child interaction to teach discipline techniques. Dollinger and Brown’s (1979) descriptive study demonstrated a parent/child interaction illustrating varying discipline techniques and goodness-of-fit between parent’s style and children’s temperament. The instructor put students into groups of three to role-play as parent, child, and observer. There were four different types of parent-child dyads: parent (tolerant)-child (good), parent (intolerant)-child (egocentric), parent (tolerant)-child (egocentric), parent (intolerant)-child (good). A 5-10 minute role-playing session ensued where the child asked for a toy and the parent had to say no. Depending on their directions, the “parents” then role-played as tolerant or not and then “children” were role-played as good or egocentric. The student observer then interviewed the “parent” and “child,” and then independently presented the results during the next class period. Students found the activity to be engaging and fun and had very favorable ratings. On a Likert scale question, 45% of students rated this activity “very useful,” and an additional 23% rated the activity “mildly useful.”


Role-playing as children. In another role-playing activity, Hamill and Hale (1996) assigned students to a fictitious “lot in life” (e.g., “your 8-year-old son has been diagnosed with ADHD” p. 245).
Students randomly choose their “lot in life” by blindly choosing a “lot” out of a box with many possible options prepared by the instructor. The author of this article did not supply a list of “lots in life.” Students wrote a paper based on empirical research about the student’s “lot in life.” Students then contacted two agencies in the community that provided services which would assist the assigned “lot in life.” Afterward the students wrote a term paper and presented a poster on how the community services could assist the child in developing. The authors suggested that the “lot in life” activity promoted critical thinking and presentation skills; however, they did not support these claims empirically.


**Engaging Experiential Learning Activities**

Experiential learning activities can make difficult developmental concepts more concrete and promote conceptual understanding. These three annotated articles reveal different ways to personally involve students in course material through experiential learning activities.

**Experiencing assimilation & accommodation.** Harper (1979) used familiar and novel examples to teach the Piagetian concepts of assimilation and accommodation. Students were given a lollipop and encouraged to demonstrate differing methods of eating it and how they may transfer those eating methods to other foods (i.e., assimilation). Then, students learned about a gloquex which was an invisible object that they have never seen before (i.e., accommodation). They were allowed to ask several questions about the gloquex in an attempt to define the object. Following the two experiences, students completed a test to assess their understanding. Without empirical evidence, the author reports that students remembered far more about the lollipop than the gloquex — demonstrating that it is much easier to assimilate knowledge than accommodate it.


**Essay exchange with children to illuminate developmental topics.** Katz (1996) had students in a child development class exchange letters with a 4th grade class to illustrate different developmental concepts. The students first developed questions in class through group discussion (e.g., “When you get angry, what do you do?” p. 113). Next, students predicted the possible responses the children would have to their questions. The questions were then sent to a 4th grade class and read out loud. The 4th graders then brainstormed on how to answer the questions and wrote back to the child development class. After receiving responses from the 4th graders, the college students discussed the 4th graders’ answers and wrote essays about how the activity helped them to understand the corresponding developmental concepts. A qualitative assessment found students reported this activity as enjoyable, fun, and interesting.


**Students create case studies in adolescent psychology.** McManus (1986b) described how to use a modified case study to teach theoretical concepts in adolescent psychology. During class time, small groups created a hypothetical case study that presented a common dilemma in adolescence (e.g., drug use). They generated potential solutions to the dilemma and ranked solutions from most to least effective. Each group then identified a target group to interview individuals about the dilemma. Out of class, each group interviewed 1-2 participants from the target group, described the case study (i.e., dilemma), and asked adolescents to rate the group’s solutions to the dilemma. Number of students interviewed and method of rating solutions was not specified by the instructor. During the next class period each group discussed their findings and wrote an out-of-class summary accordingly. Finally, each group presented their case study and results to the entire class. A qualitative assessment revealed that students enjoyed the activity and that it helped illuminate concepts in adolescent development.


**Creating games to experience development.** Nigro (1994) created an assignment that asked students to create an original game for children. The assignment required students to write a paper that described the rules of the game, the target age group of the game, and why the game was developmentally appropriate for the given age group. The author provided examples of games students created and suggestions on how to modify the assignment to engage students even more. Anecdotally, the author reported that students were enthusiastic about the assignment.


**Engagement through Films**

Using films in class can act as a springboard for engaging students in higher-level thinking of course material (e.g., Desforges, 1994; Kirsh, 1998). We
identified four articles that best demonstrate ways to encourage class engagement via film.

**Video use to experience schematic processing.** In this experimental study, Isbell, Tyler, and Burns (2007) investigated the effects of priming and the use of a video to demonstrate schematic processing. Isbell et al. informed half of the students that the baby in the video was a boy and the other half that it was a girl. They then watched a 30 second video of the baby and rated the degree to which the baby would grow up to possess certain stereotypical gender traits. In the following class period, students discussed the results of the experiment and how their gender schema influenced their rating of the baby. Isbell et al. found that students who engaged in the video activity had significantly greater schematic knowledge than the control group and rated the activity as useful, interesting, helpful, and enjoyable.


**C-SPAN and moral development.** Shapiro (1995) described an activity in which students categorized the stage of moral development politicians based on congressional debates as seen on C-SPAN. Suggested topics include debates on abortion rights, gun control, or military intervention. Students viewed short video clips that represented each of the six stages of moral development. Students then identified the stage of moral development each politician was in and discussed their answers with the entire class. Then, students defended their categorizations by citing specific examples of behavior that represent that stage of moral development. This activity could range from 15 minutes to a full class period. Although not empirically assessed, the author posited that students understanding of moral development increased from this activity.


**Using videos to stimulate critical thinking on attachment parenting.** In this situated learning activity, Sy, Brown, Amsterlaw, and Myers (2005) focused on how to apply developmental concepts (e.g., attachment and parenting) and create a hypothetical research study. Students watched a 13 minute video on attachment parenting and then spent 10 minutes discussing attachment parenting as a class. As a result of their discussion, students (in small groups) designed a hypothetical research study that would help to empirically investigate some of their questions about attachment parenting. Lastly, students gave a short presentation on their proposed study. Both qualitative and quantitative data indicated that students enjoyed the activity and deemed it to be useful and interesting and meaningful. One third of students reported the activity helped them conceptualize course material, and an additional 65% of them reported the activity helped them to develop testable research projects.


**Analyzing media targeted toward adolescents.** Ward (1985) assigned students to objectively analyze messages found in media targeted towards adolescents. Student groups picked a topic in adolescence that the media emphasizes (e.g., weight loss, beauty, sexuality), picked the type of media to be analyzed, and created a set of objective criteria to use to code data. The instructor met with each student (or group of students) to make sure that students were on track before collecting their data; some issues to look out for are the relevance of the media being examined and how the media will be operationally defined (Ward, 1985). Students then summarized their findings and presented them to the class. The authors did not assess this activity.


**Engagement through Discussion and Debate**

Classroom discussions are a great way for students to apply theoretical course material to real life situations. Here we present two articles that provide good discussion and debate topics.

**Everyday discussion points about developmental psychology.** Bryan (1988) presented a detailed description of how to use seven different discussion topics that show practical applications of course material. Each discussion topic was an everyday situation (e.g., a working mother worries about the impact of returning to work on her daughter’s attachment) and required students to apply course material to come up with possible solutions to the situation. In addition, discussion topics ran through the gamut of developmental periods (i.e., infancy through early adulthood). Bryan suggests that the discussions provide a basis for engagement. The author did not report any indicators of student enjoyment or learning outcomes.

Debates in developmental psychology. Moeller (1985) suggests that debates can be an effective tool to engage students in developmental psychology courses. Moeller asked students to debate controversial issues in child and adolescent psychology (e.g., What causes sex differences, nature or nurture?). Moeller provided instructions on how to implement the formal debate and grading policies. Descriptive data suggested that students found the activity to be meaningful and valuable.


Engagement in Writing

Students become engaged with course material through innovative and fun writing assignments that can be completed either in or out of class. Writing assignments vary from writing letters to children or parents (e.g., Junn, 1989; Charlesworth & Slate, 1986) to applying course material by analyzing a newspaper advice column or books (e.g., Boyatzis, 1992; Cabe, Walker, & Williams, 2000) or through the use of a repertory grid to compare developmental theories (e.g., Mayo, 2004).

Writing about puberty: A letter to your future child. Charlesworth and Slate (1986) discussed how to use an in-class letter writing task to elicit small group discussions on what pre-teens should know about puberty. Specifically, he asked graduate students and undergraduate students, in groups of four to six, to write one letter to their hypothetical son or daughter describing the physical and psychological changes that would happen to them during puberty. Students worked on this project during class for either 75 minutes (undergraduate class) or 105-minutes (graduate class). The anonymous letters were read aloud in class and then critiqued by peers and the instructor. Repeated Measures ANOVA found a significant difference between pre and post-test scores measuring knowledge of physical and psychological experiences during puberty.


Engaging writing analysis. Boyatzis (1992) assigned students to read *I know why the caged bird sings* and used course material to analyze the book. This book follows Maya Angelou’s development from a young girl to a young adult and echoes many developmental themes found in a child and adolescent psychology course (e.g., development of self-concept and self-esteem, parenting styles, and puberty). In a group setting, the students discussed “how Angelou’s childhood experiences exemplify two or three aspects of topics of development” (p. 221). Students used course material to support their paper. Boyatzis stated this assignment worked best as a final paper to help integrate material throughout the course. When asked how much educational value this assignment had, 90% of students rated this assignment as having either excellent or very good educational value.


Conclusions and Suggestions for Future Research

When reviewing these articles, we found several improvements that could be made. First, over 60% of the articles contained no data to support the efficacy of the classroom activities. This is largely due to the period in which these articles were published. Nonetheless, we encourage future researchers to primarily conduct quantitative inferential studies and minimize the use of introspection and qualitative analysis. Second, we found that 70% of the articles focused on out-of-class activities rather than how to engage students in class. Third, over 85% of the articles were on cognitive and social developmental issues; more activities should focus on biological/motor/physical development. There is a growing need to teach brain research and other biological topics in child and adolescent development (Zambo & Zambo, 2009). Finally, there is an apparent lack of current research in this area. Forty-six percent of the articles reviewed were at least two decades old (which likely contributed to the lack of quantitative data); whereas only 15% of the articles were published in the last 10 years. Future research should continue to investigate activities that encourage student engagement.

To fully appreciate the development of children and adolescents, one needs to observe, interact, and analyze children and adolescent’s behaviors and cognitions. One common challenge in teaching these courses is the difficulty in gaining access to children and adolescents to observe, considering the logistical and ethical constraints associated with this task. Throughout this chapter, we have tried to provide a number of different methods to achieve this goal. Specifically, students can observe children and adolescents through films, self-made videos, every day media, and in and out-of-class observations. Students can also simulate parent-child interactions, schematic processing of children, and other Piagetian
theoretical concepts. In addition to observing children and adolescents, students benefit greatly from engaging discussions and debates about current developmental issues.

As the esteemed Howard Gardner once said: “You learn at your best when you have something you care about and can get pleasure in being engaged in” (Hammonds, 2010, paragraph 10). It is our hope that these 16 annotated articles provide instructors some of the necessary tools to engage their students.

References


Adult Development: Designing a Retirement and Care Plan for Older Adults

Maya M. Khanna

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The purpose of this chapter is to provide the reader with ideas for activities for courses on adult development. Subsequently, I discuss a previously unpublished classroom activity that I use with my students in our Adolescent and Adult Development course at Creighton University. This activity centers upon the students, working in groups of 3-4 students, designing a retirement and care plan for a fictional older adult or couple. In addition to my description of this activity, I include a brief annotated bibliography of previously published activities that others have used in their courses on adult development.

In courses on development, students learn about the transitions and changes that accompany different phases of life. In a course on adulthood and aging, the course content comprises the transition from adolescence, into young adulthood, through middle age, older adulthood, and finally into death and dying. Most textbooks designed for this course focus on the physical, cognitive, and socio-emotional changes that accompany these transitions throughout life (e.g., Papalia, Olds, & Feldman, 2008). Students often treat this aging process as an object of study and find it difficult to connect these events of aging with their own experiences or those of their loved ones. These development courses, however, lend themselves to active learning experiences that engage students with the course content. I have found a surprisingly successful way to invite students to think about the life changes and the life decisions that older adults and their loved ones encounter. In particular, I ask students to prepare a plan for the transition into retirement and later life management of a fictional older adult or older adult couple. This assignment encourages students to seek out a wide array of information about aging, ranging from information about different common age-related illnesses to the types of activities that older adults can pursue to maintain and even increase some of their cognitive and physical skills.

In the Creighton University Psychology Department we have separated our coverage of development into two courses, one on infant and child development, and the other on adolescent and adult development. For the infant and child development class I find it easy to relate much of the course material to my students’ previous experiences. Most of the students have interacted with infants or children, particularly if they have had younger siblings or have been caregivers or tutors for younger children. In addition, we include a field placement experience in the infant and child development course in which the students contribute at least 16 hours across the semester to interacting with infants, toddlers, and/or children in a childcare facility within the community. Thus, all of the students have acquired real-world experiences with infants and/or children that they can reference as we discuss the developmental transitions of infancy and childhood. Unfortunately, we have not implemented a similar community-based requirement in our adolescent and adult development courses. Thus, when we reach the point in the course in which we are discussing older adulthood, many of our students have limited life-experience from which they can draw upon to inform our discussions of later adulthood.

Of course, our students have little difficulty connecting our discussions of adolescence and young adulthood to their own experiences. When we begin to discuss the transitions that accompany aging, however, a substantial proportion of our students have a hard time relating aspects of the real world to our discussions. Based on students’ self-reports, many have not thought about what they will experience after leaving college beyond what their occupations will be. Further, very few of our students indicate that they have any substantial plan for their own retirements. Creighton University students are not unique in their ignorance about the processes of aging or the planning that is necessary for retirement. In fact, Palmore (1998) found that undergraduate students have very little knowledge of the aging process. I have found that this lack of knowledge becomes increasingly obvious as our discussions of aging relate to planning for life into older adulthood. The students’ negligence in planning for older adulthood should not be too surprising given that numerous studies have indicated that adolescents and
young adults do not think about older adults or aging in a favorable way (e.g., Rupp, Vondanovich, & Crede, 2005; Kalavar, 2001). These negative views about aging appear to be related to the amount of anxiety that individuals feel about the aging process (Allan & Johnson, 2009). Additionally, the relative ignorance about aging and the anxiety toward aging exists in our students despite the fact that many of our students have parents that are in middle adulthood or entering their older adult years.

I argue that, as teachers of psychology, we should familiarize our students with many of the transitions that people encounter as they go through the aging process. Furthermore, I want students to consider many of the choices that people must make during aging. In order to do this, I ask my students to design a retirement and care plan for an older adult individual or couple. Specifically, I ask the students to work in groups of 3 to 4 students to design a plan for a fictional older adult who is (or older adult couple who are) transitioning into retirement and/or into a phase of life in which these older adults may need additional care. The students describe these care plans for their fictional older adult/couple during an in-class presentation. I design scenarios describing these fictional older adults that include a description of their health, an overview of their financial situation, information about their family (e.g., spouse, children, grandchildren, etc.), and the proximity of their family members. The scenarios vary greatly in terms of the resources (e.g., financial, family, community, etc) that each older adult has and the level of independence that each older adult could expect given his/her current level of health. I use a random assignment procedure to determine which older adult scenario is given to each group of students. I literally allow students to choose their older adult descriptions out of a hat. The example descriptions, included below, exhibit the range of resources to which each of the fictional characters has access.

Hank has lived in the midtown area of Omaha for his entire life. He is a retired accountant and is 75 years old; he is a widower who has Type II diabetes, chronic high blood pressure, and has suffered three strokes in the last 10 years. Hank has two adult daughters that also live in Omaha. Each of them works full time and has a family. Thus, they have little time to spend with their father. Hank currently lives alone, but his family is concerned about this given his health record. Hank’s monthly income consists of his social security and money from his retirement account – this income totals $2,500 per month. Hank uses Medicare as his health insurance with no supplemental insurance. Hank has $5,000 in savings and owns the home in which he lives that is worth $120,000.

Florence and Mark are a couple living in Bellevue, Nebraska. They have been married for over 50 years and live together in a home that they have paid for in full that is now worth $150,000. Florence is a retired bank vice president who currently is 78 years old. Mark is 82 years old. Florence is in the initial stages of Alzheimer’s disease. She also has high blood pressure and emphysema. Mark also is in declining health – he has heart disease and has incurred three heart attacks in the last 2 decades. Florence and Mark live over 1,000 miles from their adult children, who appear to care very little about their parents. Florence and Mark have substantial financial resources. Currently, they have 1 million dollars in their retirement accounts. They will be withdrawing 5% of the value of these accounts each year to support them – in the past these accounts have had a 5 – 7% rate of return each year. In addition, Florence and Mark will receive $3,500 from social security each month. Florence and Mark use Medicare, but they also have supplemental insurance that covers most of their other health care expenses.

Once the student groups have received the description of an older adult (or couple), they are to design a plan for this person or couple by using course material (e.g., textbook, class notes, etc) but also by consulting an array of outside sources. In particular, students are encouraged to use journal articles and books as well as to consult healthcare providers in our community. In addition, I encourage the students to contact nursing homes, assisted living centers, retirement communities, and community resource offices.

Before making the assignment, I contact several of these agencies in town to determine whether they are willing to talk with undergraduate students planning for the aging years of a fictional older adult. Representatives from these agencies have been very open and supportive of my students in these assignments. For example, the associates at the Eastern Nebraska Office on Aging have provided the students with hours of help. I have not been able to contact all of the agencies and individuals that students contact for information and advice, however. This is because I do not restrict the students in terms of whom they can contact as a resource. Thus, I cannot anticipate every individual or every place that the students would like to contact. Thankfully, no students have reported being treated poorly by any of the agencies or individuals that they have contacted. Instead, it seems that most agencies are happy to have young adults interested in thinking about the care of an older adult.

Through their research, students are to design a care plan for their older adult or older couple that includes a description of what type of housing arrangement should be made (e.g., stay at home, move into assisted living, etc), what type of healthcare will be necessary, who should provide this care (e.g., family members, nursing home staff, home health care workers, etc), and the anticipated costs of
this type of care. In addition to a description of the type of care that each older adult or couple needs, students must also indicate activities that are appropriate for this older adult to maintain or increase his/her cognitive functioning, physical activity, and social life. In all of the recommendations that students make regarding this older adult or couple, they must indicate what about this person’s (or couple’s) life leads the students to make their specific recommendations. For example, a student group may indicate that they recommend practicing yoga for an older adult if he/she is relatively physically fit, such as Mark from the previous description, but they should not recommend strenuous yoga for a person with osteoporosis and severe emphysema. As another example, students may recommend that a person who has no or very little dementia engage in bridge as a way to socialize and maintain mental sharpness, but this would not be an appropriate recommendation for a person with moderate to severe Alzheimer’s disease.

Students also provide a budget for the older adult or older couple based on their income. In addition, students describe all of the older adult’s monthly expenses, including housing, food, activities, healthcare visits, and medications. Furthermore, the students give an assessment of how the situation and needs of their older adult or couple likely will change over time. In turn, the students describe how this person’s/couple’s monthly budget will need to change to accommodate these changing and usually increasing costs. As may be obvious, the students must make many assumptions about how their older adults/couples will change over time. Making these assumptions and providing justification for these assumptions is part of the assignment. For example, students may make an assumption that a couple will be able to sell their home (for which they have paid the mortgage in full) for $20,000 more than they paid for it and be able to use the money made from the sale of the couple’s home to help pay for assisted living care. Furthermore, students may make the assumption that an older adult who recently was diagnosed with early-stage Alzheimer’s disease will become moderately to severely demented over the next 5 years and that this progression of dementia will result in the person moving from an assisted living center into a nursing home. I emphasize to the students that these are the types of assumptions that families typically must make as they are planning for retirement and aging for themselves or loved ones. I also emphasize that they should think about the ramifications of their assumptions. That is, I advise them that it may be best to make fiscally conservative assumptions about the rate of return on investments, home values, etc.

The first time that I assigned these activities, I was very worried that some of the students would feel frustrated with the variability of the fictional characters’ financial resources across the different student groups. Specifically, I anticipated disappointment and claims of unfairness from the students randomly assigned an older adult with modest means. Fortunately, my fears have not been substantiated. In fact, the variability of the fictional characters’ resources is one of the most interesting parts of this assignment and a part that the students report valuing the most. When the students make their presentation to their classmates, they see how different the life choices can be for people from various financial and family backgrounds. Seeing these differences leads many students to note how certain government policies seem to magnify the impact of socioeconomic status on older adults. For example, the students randomly assigned affluent older adults note the great difficulties that the other groups endured in planning for their older adults with restricted resources. In turn, the groups who planned for older adults with limited means see the importance and the benefits enjoyed by those students making plans for older adults who appropriately planned for their aging years. Invariably, students note that they had no idea how much retirement and end-of-life management costs and that after this assignment they better see the importance of planning for retirement early in their careers.

I have used this assignment or variations of it for 3 years and I consistently have been surprised at the amount of time and effort that most students dedicate to this assignment. In particular, I am pleased with how well the students are able to find outside sources to help in the design of their care plan. Through the use of books and journals, the students have researched about the antecedents and typical progression patterns of a number of common age-related illnesses. In addition, they have gathered a great deal of information about the most common and effective treatments for these illnesses. They have even investigated the different costs that go along with various types of treatments and which government-funded and private programs are available to help older adults with limited means seek treatment. Students also investigated the types of community activities that are available to older adults in our area. In addition, they found information about what types of activities are best-suited for older adults with various levels of physical and cognitive fitness as well as for older adults with varying levels of social support. The students seem to thrive on the task of finding information through a myriad of
sources in order to address an assignment with such real world relevance.

Furthermore, I have been very pleased and even somewhat surprised with how much leg-work most of the students groups are willing to do for their projects. Many of the students have interviewed a number of physicians, home healthcare workers, assisted living center directors, social workers, and state-level administrators of Medicare and Medicaid. Most of the groups tour one or more local assisted living centers or nursing homes to gather information to prepare for their presentations. In fact, several groups that planned for older adults from relatively low socioeconomic means interacted extensively with nursing home directors and Medicaid administrators. Through these interactions they ascertained how to negotiate the complicated financial regulations for qualifying older adults for nursing home care through Medicaid. Last year, several of the student groups became aware of how the then-in-flux healthcare reform bill would impact their plans. Several noted that they had not paid much attention to healthcare reform before they had to design a care plan for an older adult. There were several times that I walked into the classroom before class and found the students debating the relative benefits and drawbacks of the various versions of the healthcare bill. Sometimes it is hard for me to believe how much they were learning and how much they were teaching me! In fact, I greatly look forward to the students’ presentations because I always learn something new that will help me plan for my parents’ or in-laws’ transition into retirement as well as my own.

Annotated Bibliography of Activities for Adult Development courses

Blieszner (1999) describes activities for her classes on adulthood and aging in which students explore family-relationships as these relationships relate to aging. She provides suggestions for integrating the examination of family relationships into various topics included in a course on aging. She also provides brief descriptions of 11 assignments and class activities that students can complete to highlight the relationship between family and aging. Similarly to the Whitbourne And Collins (1999) article, this article provides a wide variety of class activity suggestions, but does not provide extensive details of how to conduct these activities. This article would be more useful for developing a course plan than for acquiring detailed instructions of how to conduct the activities.

Hershey and Jacobs-Lawson (2001) describe an activity in which they invite students first to discuss their beliefs about whether there exists a stage of life that is the prime of life. The instructors then lead students in a discussion of the multiple domains of life (e.g., physical health, biological fitness, work life, financial stability, family life, etc.) while focusing the discussion on the fact that people typically enjoy success in these domains at different stages of life. Students then work together to create a timeline in which they document the relative quality of life across these multiple domains throughout the lifespan, indicating the relative success of these domains at each age phase (e.g., young adulthood, middle-age, etc.). This timeline shows that typically there is no one point in life in which all domains have the highest value, for most people. Hershey and Jacob-Lawson indicate that their students consider the activity quite valuable and useful.


McGuire and Zwahr (1999) describe two activities that they used in their classes on adult development and aging. In the first activity, a
fictional corporation invites the course students to help them convert the university campus into a retirement community. The students work together in teams of three to four to design a conversion plan so that the campus buildings will be appropriate for an older adult population. The students must address 10 considerations (e.g., physical abilities of residents, cognitive health, type of medical care needed, etc.) of their population with each of their design recommendations. The students justify their specific recommendations by citing reputable sources. The final projects for this activity include an in-class presentation describing their conversion plans and a group summary paper outlining their recommendations for the conversion process. In the second activity, McGuire and Zwahr ask their students to design products targeted for an older adult population. The products should help older adults maintain their independence and optimize their remaining skills. Students must also design a sales pitch for their product that they present during an in-class convention. They also submit a summary paper describing their product and outlining the reasons for its specific features. The authors indicate that students find these activities to be challenging, but very beneficial. In fact, many students indicate that these activities are the most outstanding features of the course.


Sheldon (1998) describes a course activity that is an extension of one first described by Fried (1988). In this activity, students work together in small groups and generate a list of 10 positive and 10 negative stereotypes that they hold about older adults. The groups share their lists of stereotypes with the other groups in the class and the entire class discusses the similarities and differences across groups. In addition, they discuss the relative ease of generating a list of negative stereotypes along with the difficulty in generating a list of positive stereotypes for older adults. Sheldon then specifies that instructors should have generated a collection of articles and other sources that provide either support or disagreement with the students’ stereotypes of older adults. That is, the instructor needs to spend substantial time before this activity anticipating the stereotypes that the students may suggest and locating articles or other sources addressing those stereotypes. Sheldon’s students indicate that they enjoy this activity and that it is as interesting as it is eye opening.


Walton (1988) describes a project designed for adult development classes in which students must record interviews that they conduct with people from different phases of life and then relate these individuals’ experiences to what they are learning about developmental theory in a final paper. Walton also describes how she prepares the students for these interviews throughout the semester by reviewing questions that students would like to ask their interviewees. In addition, throughout the semester, she invites visitors from various phases of life to engage in sample in-class interviews so that the students may see an interview in action. Students also participate in these in-class interviews and later receive Dr. Walton’s critique of their interview questions and style. At the end of the semester, Dr. Walton asks her students to react to this assignment. She reports that her students seem to greatly value this assignment and find it useful.


Adulthood and aging are novel topics for many college students. In fact, many college students do not think much about their lives beyond college, let alone their older adult years. Inviting them to engage in activities inspired by the real world is a very effective way to encourage them to think about their own development, maturation, and retirement. As can be seen from the example activities described above, there are many ways to involve students in planning for their own development throughout the lifespan, and for their eventual aging and retirement. Not only do students find these activities eye opening and enjoyable, they also find them to be some of the most valuable lessons in their coursework.

**References**


Classroom Activities for a Course on Death, Dying, and Bereavement

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Death affects everyone. Yet, it is often very difficult for people to openly discuss their thoughts, feelings, and beliefs about death. This chapter provides activities designed to promote active student engagement in the exploration and discussion of death. This is accomplished in two ways. First, a novel classroom activity is introduced. This activity increases students’ knowledge about organ and tissue donation while encouraging students to explore and share their thoughts, feelings, and attitudes toward organ and tissue donation. Second, an annotated bibliography provides a summary of published resources that contain a variety of teaching activities. The references provided in the annotated bibliography were selected based on the likelihood that the activities would increase students’ self-awareness and promote classroom discussions. The activities described in both sections of this chapter capture the attention and interest of students, encourage them to become active participants in the exploration and discussion of death, and educate them about death, dying, and bereavement.

Exploring Beliefs and Attitudes Toward Organ and Tissue Donation: A Classroom Activity

More than 100,000 people are on the national organ transplant waiting list. Due to the shortage of suitable organs, approximately 19 people die each day waiting for an organ. This shortage is mainly the result of a lack of organ donors (Corr, Nabe, & Corr, 2009; www.anatomicalgiftact.org; www.organdonor.gov).

Under the stipulations of the Revised Uniform Anatomical Gift Act (2006), adults, emancipated minors, and minors authorized under state law to apply for a driver’s license may make an anatomical donation for the purposes of transplantation, education, or research that will commence at the time of their death (www.anatomicalgiftact.org). If emancipated minors, young adults of driving age, and adults of sound mind are able to make their wishes of organ donation known, then why is it that more than 100 people on the waiting list die each week?

Research suggests that the majority of Americans has a positive attitude toward organ and tissue donation (Feeley & Servoss, 2005). Although there is generally a positive attitude toward organ and tissue donation, there is a reluctance to discuss organ and tissue donation with family members and to register as a donor (e.g., Cosse & Weisenberger, 2000; Feeley & Servoss, 2005). Surveying 502 university students, Feeley and Servoss (2005) found that the majority of students expressed positive attitudes toward organ donation. However, only 11% were registered donors.

These findings suggest that a course on death, dying, and bereavement should encourage students to reflect on their attitudes toward organ and tissue donation (OTD). The following teaching activity consists of a series of exercises designed to (1) encourage students to explore their thoughts, feelings, and attitudes toward OTD, (2) increase student knowledge about OTD, (3) encourage open discussions, and (4) encourage students to share their views about OTD with their classmates and family members. The teaching activity begins with a reflection assignment to encourage students to explore their thoughts, feelings, and attitudes toward OTD. A questionnaire assesses student knowledge about OTD and provides a means by which the instructor can provide accurate information and encourage classroom discussion. The teaching activity ends with a reflection assignment to encourage students to examine their thoughts, feelings, and attitudes toward OTD after being presented with accurate information about OTD and being exposed to others’ views.

Reflection Exercise I

This written reflection exercise encourages each student to think about organ donation. Hopefully, by reflecting on their thoughts, students will be more likely to engage in class discussion. Instructors should ask students to reflect upon their thoughts,
feelings and attitudes toward organ donation with the following directions:

Please spend the next ten minutes writing about your thoughts, feelings, and attitudes toward organ and tissue donation. What life experiences (e.g., knowing someone who has received a transplant) and/or factors have influenced your thoughts, feelings, and attitudes toward organ and tissue donation? If someone were to ask you how you feel about organ donation, how would you respond?

**Questionnaire**

After students complete the written assignment, instructors should ask students to complete the questionnaire (see Appendix A; http://psychology.missouri.edu/sites/psychology.missouri.edu/files/Bauer_DeathDyingBereavement_Appendices.pdf). The questionnaire tests students’ knowledge about OTD and solicits information for class discussion. In Section A, students indicate whether they have heard a particular statement before, and then decide whether the statement is true or false. The statements are common myths about organ and tissue donation. In Section B, students complete a series of fill-in-the-blank sentences about OTD. In Section C, students indicate whether they support OTD, have had a personal experience with OTD, are registered donors, and have discussed their wishes with their family members.

**Accurate Information**

After the students have completed the written exercise and the questionnaire, instructors should provide general information about organ donation. Accurate responses to the first six questions on the questionnaire, accurate statistical information (as of January 2011), and general information about organ and tissue donation can be found in Appendix B (http://psychology.missouri.edu/sites/psychology.missouri.edu/files/Bauer_DeathDyingBereavement_Appendices.pdf). Additionally, it is recommended that instructors familiarize themselves with the most up-to-date information on organ and tissue donation.

Accurate responses to the first six questions on the questionnaire can be found in Appendix B. The questionnaire tests students’ knowledge about OTD and solicits information for classroom discussion. In Section A, students indicate whether they have heard a particular statement before, and then decide whether the statement is true or false. The statements are common myths about organ and tissue donation. In Section B, students complete a series of fill-in-the-blank sentences about OTD. In Section C, students indicate whether they support OTD, have had a personal experience with OTD, are registered donors, and have discussed their wishes with their family members.

**Classroom Discussion**

While classroom discussions often lead to active student participation, it is important to note that classroom discussions on organ and tissue donation can be very uncomfortable for some students and can lead to intense emotions. Therefore, instructors should provide students with the number to the counseling center. Instructors should appreciate that some students may feel very uncomfortable talking about their thoughts, feelings, and attitudes toward OTD. Therefore, instructors should not force students to engage in the conversation. Rather, instructors should ask for volunteers to share thoughts, feelings, and attitudes about organ donation. Before beginning the classroom discussion, instructors should emphasize that in the United States individuals have the right to choose whether or not they would like to be organ donors. While the majority of the students are likely to express positive attitudes toward organ donation, some will express negative attitudes. Therefore, it is extremely important that instructors emphasize the importance of respecting each others’ thoughts, feelings, beliefs, and encourage an engaging conversation where all viewpoints are welcomed.

Instructors can begin the conversation by taking a poll of students’ responses to questions 11 through 14 on the questionnaire. Next, instructors can ask students to raise their hands if they (1) support organ donation and tissue donation, (2) partially support organ donation, (3) do not support organ and tissue donation, or (4) are undecided as to whether or not they support organ and tissue donation. Instructors should encourage a class discussion on the perceptions of organ donation. To start the conversation, instructors may want to ask questions such as: Why might some people choose to donate and others decide not to donate? To maintain the conversation, instructors could also ask volunteers to share their thoughts from the written exercise. As it is likely that the majority of the students will report supporting OTD, it is important to provide the students with reasons why some individuals may oppose OTD.

Next, instructors can ask students to raise their hands if students know someone personally who is (1) waiting for an organ donation, (2) has received an organ donation, or (3) has donated an organ. Many
websites contain personal stories about donor families, patients waiting for transplants, and transplant recipients. Instructors may initiate a classroom discussion by sharing these stories. Or, instructors may initiate a classroom conversation by asking students if anyone would like to share his or her own experiences with OTD. Instructors may also want to ask the volunteers to share how this experience has influenced their thoughts, feelings, and attitude toward organ donation. Through discussing their experiences, the volunteers may help their classmates become aware of some of the thoughts and feelings evoked when deciding whether or not to donate organs and while waiting for a transplant.

Instructors can also take a poll regarding whether students (1) are registered organ donors, (2) are not currently registered, but intend to register, (3) choose not to be a registered donor, or (4) are undecided. The instructor can then ask students to share their reasons for registering or choosing not to register. Instructors may also want to ask those who intend to register why they have not yet done so.

It is extremely important for the students to understand the importance of discussing their wishes with their family members. Instructors can lead a discussion about students’ decisions regarding informing their families and romantic partners about their wishes. Instructors may want to ask those who have talked to their family members about OTD to share their stories about the conversation (e.g., how did they begin the conversation, what was the outcome).

After concluding the discussion, instructors should distribute the handout (see Appendix C; [http://psychology.missouri.edu/sites/psychology.missouri.edu/files/Bauer_DeathDyingBereavement_Appendices.pdf](http://psychology.missouri.edu/sites/psychology.missouri.edu/files/Bauer_DeathDyingBereavement_Appendices.pdf)) which provides general information about organ donation, a list of additional resources, and information about making one’s wishes known.

**Reflection Exercise II**

This written reflection exercise encourages each student to reflect upon what they have learned and their opinions toward organ donation. Instructors could use the following directions:

Please spend the next five to ten minutes responding to the following questions. What have you learned about organ donation? How has the class discussion influenced your thoughts, feelings, and beliefs about organ donation? Do you still have questions about organ donation? If you do, what are they? If someone were to ask you how you feel about organ donation, how would you respond? If you were to talk to your family about organ donation, what would you discuss?

**Conclusion**

Instructors may choose to end this teaching activity after students complete the written assignment, or they may ask students to share their reflections. Although this teaching activity focused on encouraging students to explore and share their thoughts, feelings, and attitudes toward organ donation, there are a variety of activities (e.g., panel discussions, debates, role-playing exercises, site visits) covering many topics that should be utilized in a course on death, dying, and bereavement. The annotated bibliography below provides a summary of published resources that contain activities designed to facilitate student learning and enhance student engagement. The annotated bibliography is divided into 3 main sections. Resources in the first section provide a variety of activities that can be used in the classroom. References provided in the second section provide detailed information about a specific type of activity (e.g., small group discussions, journal assignments, service learning projects, site visits). Resources in the third section focus on activities for specific topics (i.e., death perspectives, grief, the stage theory of dying).

**Annotated Bibliography**

**General Activities**

Corr (1978) outlines 13 major topics to explore in an introductory death and dying course. For each topic, he provides background information and possible classroom activities that not only increase students’ knowledge but also enable them to confront their own feelings and attitudes. He recommends various activities (e.g., role playing, oral and written responses to discussion questions, journaling, guest speakers, films, books, case studies) to actively engage students in the exploration and discussion of death and dying.


DeSpelder and Strickland’s (2005) workbook accompanies the DeSpelder and Strickland (2004) text. In the first section of the workbook, the authors encourage students to examine their attitudes toward death by completing a death questionnaire and composing a deathology (i.e., an essay in which an individual describes their experiences with and reactions to death and losses and then reflects on how these experiences have shaped their attitudes and beliefs toward death). The greater part of the workbook contains study material for each textbook

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chapter. The authors present chapter summaries, important terms, practice questions, additional readings, an annotated list of organizations and internet resources, and additional written exercises. These exercises enable students to further explore the course material. Example activities include: examining how death is depicted in cartoons, television, and music; reflecting upon death customs in different cultures; creating an imaginary hospice; and writing an ethical will. These activities enable students to further explore what they learn in class and provide a means through which students can gain insight into their own thoughts and feelings about death.


DeSpelder and Strickland’s (2009) instructor’s manual includes an overview of the chapter contents, a list of objectives, a list of key terms/concepts, assessment questions, teaching activities, and an annotated list of audiovisual resources for each chapter of their textbook. Teaching exercises include topics for classroom discussions, role-playing exercises, interview assignments, potential field trip sites, debate topics, specific written assignments (e.g., journal, research), and suggestions for guest speakers. Because of the variety of activities provided in the manual and the number of engaging class discussions my class has experienced using some of these activities, I have found that this to be an extremely helpful resource. I believe that it is one of the most useful resources available for both new and experienced death education instructors.


Harvey and Hoffman (2002) share how Harvey engages his students in a large lecture course on loss and trauma. In addition to lecturing, he incorporates approximately 20 videos or video clips, engages students in discussing the videos, and invites 7 – 10 guest speakers. The authors provide background information about 3 of the videos. Students take 2 multiple choice exams, write a book review, and journal about a loss event. Evaluations from 1,295 students indicate that even in a large lecture setting the course and assignments not only increased their interest and knowledge in the topic, but also increased their knowledge about the diversity of loss, compassion for others’ losses, and their ability to express their own losses.


Knott, Ribar, Duson, and King (1989) describe icebreakers, classroom activities, role playing scenarios, and affective experience exercises (to aid in exploring, identifying, and discussing feelings) that can be utilized in a death and dying course. For each activity, the authors provide information regarding preparation, goals, time allotment, the procedure, and guidelines for discussion. The activities are appropriate for use in middle schools, high schools, higher education, and for professional education. Educators can use the icebreakers to introduce a group of people or a topic. For example, to introduce reincarnation, the authors provide a set of instructions and then ask participants to complete the following: “I’m coming back as …” (p. 3). They also provide detailed instructions on activities that have participants calculate their longevity, contemplate the consequences of their death, become more aware of the finiteness of life, and discuss decisions faced by terminally ill persons. The authors also include sixteen role-playing scenarios (e.g., infant death, suicide).


Mills, Reisler, Robinson, and Vermilye (1976) present age-appropriate learning activities for 4 age groups (i.e., 5-6, 7-9, 10-12, 13-18) in their comprehensive text. Educators can adapt many of these activities for older (including college-age) or younger individuals. For each exercise, the authors identify a learning opportunity, state an objective, describe an activity, and provide notes to the instructor. The authors gear the majority of the learning activities (54 out of 65) toward the 13-18 year old age group. The learning activities focus on a variety of topics including: difficulties in saying goodbye, feelings of empathy, death classifications, values that may influence life and death decisions, assassination, dying for a cause, cryogenics, and life insurance. This text provides excellent ideas that an instructor could easily adapt or further develop to meet his or her class objectives. Although the majority of the activities are appropriate for college-age students, instructors could use some of these activities to illustrate to college students the types of activities that would be appropriate for children of various ages.
Specific Activities

Death visualization. Perlin (1982) provides step-by-step instructions for a 15-20 minute voluntary death visualization exercise that he uses with both college students and hospice workers. Using a combination of relaxation and visualization techniques, the author asks students to imagine experiencing a series of scenarios. The story begins with the students imagining going to a doctor for a routine physical and finding out that they have a lung tumor that needs immediate medical attention. The author then tells students that six months have passed and that there is only a short period of time left to live. The author then informs the students that they have died. After each scenario, students respond to questions. Students form small groups to discuss their visualizations. Perlin states that few individuals report feeling as though they had actually died, and, many describe their feelings. Perlin asserts that this exercise initiates exploration of one’s own feelings toward death and dying and may increase empathy toward those who are facing death.

Group discussions. In order to expose students to new perspectives and to encourage students to explore their own thoughts and feelings toward death, Thornton (1991) asks students to share their thoughts in small group discussions (6-8 students). Throughout the semester, Thornton assigns 6 discussion topics (i.e., death concepts, children’s literature, dying process, euthanasia, grief, suicide). To prepare for the discussions, students read assigned materials (selected to increase interest and knowledge) and respond to questions by writing a reaction paper. In order to increase the likelihood that students actively participate in the discussion groups, the reaction papers are due prior to the discussions. Group facilitators encourage participation from all group members. Students receive points for their reaction papers and for participating in the group discussion. Evaluations across two courses indicated that the majority of students believed that the assignments and discussions increased their knowledge, provided alternative perspectives and opinions, and facilitated the exploration and expression of their own ideas.

Journal assignments. Doll, Kereakoglow, Sarma, and Hare (2008) state that some students may feel extremely uncomfortable if asked to share their death experiences with an entire class. Therefore, the authors assigned journal questions to gauge students’ learning and to encourage class participation. Over the course of the semester, students completed two journal assignments. In the first, students recalled either the death or funeral of a loved one. They then planned their own funerals and composed their own obituaries. In the second, students discussed an issue covered in class with three people and wrote their own death fantasy (i.e., a description of how they envision their own death). The majority of students reported the journaling to be a positive learning experience. In addition to positive outcomes, the authors point out that journaling may be extremely painful for some students and that these students may need to be encouraged to seek professional help. The authors provide their journal instructions as well as additional suggestions (e.g., asking for volunteers to read an entry).

• Thomas’s (1984) edited volume contains a variety of resources for educators working with young children and young adults, including 6 articles focusing on instructional methods, a section on personal narratives (e.g., loss of a classroom pet [Butler]; loss of a student [Lubetsky & Lubetsky]), a list of fictional and non-fictional books, and an annotated list of organizations. Yarber presents 5 issues that a teacher should contemplate prior to teaching a death class and provides lists of possible topics to cover, appropriate guest speakers, and a variety of learning activities (e.g., field trips, role-playing). Dahlgreen and Prager-Decker provide detailed information for teaching elementary school children about death using 5 activities. These activities could be used to educate college students about how to explain death to children. For example, they suggest that teachers bring in both a living and a dead plant to initiate a discussion about differences between living and nonliving things. They also describe how to use children’s literature to explain what happens when someone dies and to describe the feelings that someone may experience. Overall, the book contains valuable articles for someone teaching a death education course (especially a course directed toward young children or toward future teachers of young children). Unfortunately, some sections of the book are outdated (e.g., the list of books and organizations).

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death experiences as a pedagogical tool.  
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Panel discussions. Dodd’s (1988) students participated in a small panel discussion on bereavement. In this article, he provides information regarding how he recruits panel members, an overview of the activity, and information about guiding and moderating the panel discussion. The students (both the panelists and the audience members) responded positively to the panel discussion, and audience members became actively engaged in the discussion. Additionally, students reported learning valuable information and interpersonal skills that allows them to feel more comfortable interacting with the bereaved and prepares them to be more emotionally supportive of those who are grieving.


Service learning projects. In addition to describing a variety of activities, Basu and Heuser (2003) provide detailed information about the preparation (e.g., securing appropriate service learning sites), implementation, and evaluation of a voluntary service learning (SL) project. The authors asked students to keep journals of their experiences, share their experiences with classmates throughout the semester, write an analytical paper, and deliver a 15-minute oral presentation about how their experiences related to the academic material covered during the semester. Students responded positively, indicating that the SL project enhanced their understanding of the course material and of death more generally, offered new perspectives, and created a greater sense of responsibility to the community. The SL site supervisors also provided positive feedback. The authors offer advice to others who wish to incorporate a SL project into their course. Instructors should find the Appendices extremely helpful because they contain an instructional handout for students, an SL contract, journal instructions, and student and agency evaluation forms.


Site visits. Garces-Foley (2008) provides advice on how to increase the likelihood that a site visit (e.g., visiting a funeral home) is successful. She stresses the importance of planning the site visit, preparing students for the experience, and evaluating the site. She provides specific reading assignments and suggestions for cemetery and funeral home visits.

For a funeral home visit, she suggests inquiring about viewing the embalming room and crematorium. She recommends assigning chapters from Gary Laderman’s (2003) Rest in peace: A cultural history of death and the funeral home in twentieth century America and Stephen Prothero’s (2002) Purified by fire: A history of cremation in America. She also suggests specific websites for examining additional funeral practice topics and proposes several assignments that enable students to integrate their site experience with the course material (e.g., research paper, surveys, role-playing scenarios). This chapter should be helpful for instructors who are new to planning death education field trips.


Supplemental readings. Carr’s (2006) interdisciplinary compilation of readings focuses on 8 main topics which he labels: (1) heavens and hells, (2) resurrection and reincarnation, (3) death and philosophy, (4) being with the dying, (5) suicide, (6) the rights of the dying, (7) near-death experiences, and (8) preparing for death. Due the diversity of the topics, this book complements introductory death education texts and can be used as a supplemental reader in a variety of disciplines (e.g., religion, philosophy, psychology). In addition to providing a variety of readings (i.e., 4-7 readings per topic), Carr provides discussion questions at the end of each reading and presents possible small discussion group exercises and learning activities at the end of each topic. He recommends various films, topics for debate, people to interview, site visits, role-playing scenarios, and topics for further discussion.


Specific Topics

Death perspectives. Fetro, Lyde, and Russell (2001) describe a series of classroom activities that introduces students to five perspectives of death (i.e., ecological, humanistic, religious, reincarnation, life after life), enables students to identify these perspectives in everyday surroundings, and encourages students to reflect upon their own death perspectives. Students define death and answer a series of questions. Music is used to introduce and illustrate the five perspectives. Then, students are divided into 5 groups and asked to draw one of the perspectives and describe it to the class. Students complete a self-assessment measuring the extent to which each of the five perspectives were part of their own death perspective. The instructor collects the
self-assessments and then summarizes the students’ responses. This summary enables the instructor to illustrate how people have different death perspectives. Instructors may find the authors’ outline of the main points of the perspectives, sample music selections, self-assessment handout, summary chart, and additional assessment techniques helpful for incorporating these activities into their own classrooms.


**Grief.** Engel (1980-1981) describes an exercise developed to help people working with the bereaved discover that, while there are some commonalities in the experience of loss, there are also individual differences in the grieving process. Engel provides background information and advice on implementation of this exercise. After viewing the emotional film *What Happened to Pity?*, participants shared their feelings and reactions. Engel provides the dialog that took place, which illustrates that the participants experienced a variety of feelings, including a blend of both common and diverse responses. The dialog also provides a structure that an instructor could use in the classroom. Although Engel geared the workshop toward those individuals who work with the bereaved (e.g., physicians, social workers, clergy), this group exercise, in conjunction with a class lecture, would enable students to gain both intellectual and emotional knowledge about the uniqueness of grief.


Gould’s (1994) goal of providing his students with a theoretical understanding of grief begins by having students examine their own personal losses. Students write about a personal grief experience that they are willing to share with a small group (i.e., 3–4) of classmates. Each student shares his or her experience in a small discussion group. As each person tells his or her story, one member compiles a list of the feelings and behaviors mentioned. Each group discusses similarities and differences among the stories. Then, each group crafts a visual display of their conclusions and shares it with the class. The discussion focuses on similarities and differences among the projects, in terms of research and theories. Gould reports that his students’ visual grief models are insightful, and he shares four of the visual models created by his students (e.g., boat, roller coaster), to illustrate that there are many different forms of grieving.


**Kubler-Ross’ (1970) stage theory of dying.** Goodale (1981) describes a classroom activity that facilitates student exploration into the feelings and reactions that a dying individual may experience. Students were assigned numbers and were informed that someone (based on their assigned number) would die by the conclusion of the class period. The author then asked students to share their reactions and feelings. Upon completion of the activity, students discussed their comments in conjunction with Elizabeth Kubler-Ross’ (1970) stage theory of dying. Goodale provides suggestions to increase class discussion and to debrief students upon the completion of the classroom exercise. Comments made in his own classes demonstrate that this activity complements typical lecture material (e.g., Kubler-Ross’ stage theory) on dying.


**Conclusion**

This chapter described a variety of teaching activities designed to capture student interest, encourage active participation, and educate students about death, dying, and bereavement. These activities facilitate student learning while enabling students to explore their thoughts, feelings, and attitudes. Additionally, many of these activities (e.g., panel discussions, guest speakers, role playing, class discussions, films, interviews) encourage students to not only reflect upon their own thoughts but to also entertain and contemplate others’ views. As a result, these activities help students appreciate the many factors that can influence an individual’s thoughts, feelings, and attitudes toward aspects of death, dying, and bereavement. It is my sincere hope that the aforementioned activities and discussion topics facilitate student learning and enhance student engagement in your classroom.
References


Footnotes

1 The United States Government Information on Organ and Tissue Donation and Transplantation website (www.organdonor.gov) is an excellent resource. It contains statistical information, information about what can be donated, who can donate, religious views, transplantation basics, risk factors, as well as additional materials and resources. The United Network for Organ Sharing (UNOS) website (www.unos.org) is also an excellent resource containing information such as the history of organ transplants, statistical data, organ allocation, and patient information. The Gift of a Lifetime website (www.organtransplants.org) contains similar information (statistics, myths, religious views) as well as photo-documentaries and classroom activities for educators. Instructors may also want to read the Revised Uniform Anatomical Gift Act (2006; www.anatomicalgiftact.org).

2 Surveying 502 undergraduates, Feeley and Servoss (2005) found that 14% percent of their participants, who were not registered donors, expressed a general negative attitude toward organ donations (e.g., “I just don’t want to donate”; p. 241). Others provided more specific reasons for opposing consenting to organ donation: 4% cited philosophical/religious reasons (e.g., “organs are meant for me”; “body wholeness”; p. 241), 2% reported emotional reasons (e.g., “don’t want to be cut open”, “scared”; p. 241), 1% articulated myths, and 1% indicated family objections to organ donation. Other researchers have found similar results indicating that those who do not support OTD provide fear of premature death, fear of bodily mutilation, anxiety, and religion as reasons for their opposition (e.g., Minniefield, Yang, & Muti, 2001; Morgan & Miller, 2002).

3 The Gift of a Lifetime web site (www.organtransplants.org) and the Donate Life America web site (http://www.shareyourlife.org/StoriesOfHope/) provide photo-documentaries of donor families, patients waiting for transplants, and transplant recipients. Instructors and students can view pictures and hear stories from real people.
Group Dynamics

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Even students who are personally opposed to experiential learning activities accept, if somewhat grudgingly, the need for group-level activities involving collaboration with their fellow students in a course dealing with group behavior. Students in such courses need not go far to find real-life examples of the processes and concepts examined in their textbooks. They can read about and discuss such concepts as cohesiveness, leadership, social influence, communication, conflict, conformity, and social facilitation, but they can also experience these processes first-hand within the confines of the class itself. The class as a whole exhibits the dynamic properties of larger, more formally organized groups, but it can also be subdivided to create smaller groups that provide further opportunities to explore specific group-level processes.

Engagement-elevating activities used in a course such as group dynamics fall into two broad categories: topic-focused short-term activities and problem-focused, longer-term projects. Topic-focused activities are, in most cases, deliberate applications of a concept or process in a group-based experience and are typically tied to the content of the course in a direct way. For example, when students study group decision-making they may meet in small groups to make a series of decisions. Afterwards, they examine their group’s decisions, and gauge for themselves the extent to which their group reacted as theory and research would suggest. Problem-focused projects, in contrast, ask students to work in small groups over an extended period of time (i.e., weeks or months) on a group project. For example, students may be asked to develop a paper or a class presentation on a specific topic or conduct a research project under the guidance of the course instructor.

Both types of activities can help the students gain detailed knowledge of the course topics, experience group processes first hand and perhaps even develop practical skill useful when working with others in groups. Both can falter, however, if the students never grasp the pedagogical purposes of the activities. Students often enjoy the active-learning, experiential phase, but then they fail to make the connection between the experience and the psychological concept (Forsyth, 2003). To help them make this connection, the instructor may need to add description, analysis, and application phases to complete the learning cycle. Students must not only experience the event but must also describe their experiences, tie their experiences back to course-related concepts and findings, and consider the personal and practical implications of the experiences. In consequence, at minimum, extensive discussion is needed following each activity, but ideally students should complete some type of written analysis that helps them translate their experience into psychological knowledge (Forsyth, 2003).

The Task Challenge Activity: An Engaging Example

Group productivity, including performance and decision-making, is a key topic in the field of group dynamics, and one that lends itself well to experiential learning. Students often take issue with research findings when these findings clash too strongly with their intuitive beliefs about groups, and nowhere is this clash more striking than in analyses of group performance (Richard, Bond, & Stokes-Zoota, 2001). Students are reluctant to accept the facts that brainstorming rarely generates solutions that are more creative than those generated by individuals, that cohesive groups only rarely outperform less cohesive ones, and that groups that discuss a problem sometimes err more than groups whose members make judgments individually. Students also tend to agree with the teamwork motto “no one person is as smart as the many,” even though the value of a group-approach to a problem depends on the type of task or problem the group faces. Some tasks require high levels of coordinated activity on the part of groups and can only be completed when each group member contributes. Other tasks, in contrast, do not require very much in the way of coordinated action on the part of the group members; even if group members make little or no attempt to adapt their actions to match those of others the group will still succeed (or fail).

I developed the Task Challenge Activity (TCA) to help students recognize how different tasks require the group members combine their inputs in different
ways and that success on a task depends on the fit between their combination strategy and the task’s demands. Inspired by Steiner’s (1972) taxonomy of group tasks, the TCA asks students to work in groups on a series of problems and puzzles that differ in their demand for coordinated activity. The students can solve some of the problems without even interacting with the other group members. Other problems, in contrast, require discussion among the members and the identification of the single solution that represents the group’s answer. Others stress accuracy in one’s work, whereas others emphasize quantity over accuracy. As the students move from one challenge to another, they gain a more detailed understanding of the relationship between the coordination demands each task puts on the group and their group’s reaction to those demands. The version of the TCA examined here uses three basic types of tasks identified by Steiner—compensatory, disjunctive, and additive—but if time allows I add some of the other types of tasks discussed by Steiner (see Forsyth, 2010).

I begin by breaking the class up into small groups with 4 to 6 members. I am careful to make certain that groups do not include close friends or romantically involved pairs, and ask the groups to form in different parts of the room. Unless the layout of the room prevents it, I require the groups meet in the same room (i.e., I deny requests to work outside), and I begin each session by asking members to exchange names and any other relevant background information with one another. Then I distribute a problem sheet that contains the challenges the group must overcome.

Instructions for Students

Your group is to complete a series of different problems. Please read the directions to each problem carefully before starting, and ask questions if you are uncertain as to how to proceed. Complete Item 1 individually, without any group discussion. All other problems are to be completed by the group.

1. Individual Distance Task: Without consulting with any one, write down your estimate of the distance, in miles, between Paris, France, and Mexico City, Mexico.

2. Group Distance Task: Compute a group decision for question #1 by averaging together everyone’s judgments. List each person’s individual decision, and then calculate the average.

3. Discuss item #1 as a group, and reach consensus on the best estimate. What is the distance estimate that the group will put forward as its best estimate of the distance?

4. Puzzle Task: What is the next letter in the following sequence? O T T F F S S

5. Horse-trading Problem: A man bought a horse for $60 and sold it for $70. Then he bought it back for $80 and again sold it for $90. How much money did he make in the horse-trading business?

6. Time Task: Select a person to be the recorder for your group. On a separate sheet of paper have that member record as many uses as your group can think of for old tires. Check the time before you start, and take only 5 minutes.

Solutions and Interpretation

I collect the answers from the groups in a collective debriefing session, posting each group’s scores on a grid on the board for comparison. Intergroup rivalry usually builds during this process, and it provides me with the opportunity to discuss the relationship between cohesion and task performance. In some cases I even offer the group with the highest score some type of bonus, such as exemption from having to complete the paper in which students apply course concepts to their group experience. However, I keep focused on the activity and what it reveals about the various types of problems the groups encountered.

The correct answer to Items 1, 2, and 3, the distance between Paris, France, and Mexico City, Mexico, is 5,721 miles (9208 km). This problem illustrates group performance on compensatory tasks. When students combine their individual estimates, the group average is likely to be close to the correct number, confirming the “wisdom of groups” (Surowiecki, 2004). If time allows, I also compute the estimate by using the entire class’s individual estimates and compare that estimate to individual averages, arithmetic group averages, and the estimate chosen through group discussion. In many cases the mathematical solution to the problem is better than that chosen via discussion. The compensatory method owes its advantages to its relative immunity to loss of efficiency and accuracy caused by poor group communication, status dynamics, and so on.

Items 4 and 5 are disjunctive problems, because the group must settle on a single answer that members must agree should be put forward as the group’s answer. Item 4 is a simple riddle, and the answer is E, because the sequence is the first letter of the first 8 digits, One, Two, Three, Four, Five, Six, Seven, and Eight. Item 5, the famed horse-trading problem, is surprisingly difficult for groups to solve—and during the tortured discussion many principles of group performance emerge. For Item 5, the group can solve the problem if it contains just a single person who knows the right answer and can explain the solution. For Item 6, the individual who knows the correct solution ($20) often needs to be
supported by at least one other person before the solution is accepted, thereby confirming the truth-supported wins rule decision scheme of collaborative decision making (Forsyth, 2010). Item 5 is a simple brainstorming problem, and the group that generates the most uses is considered the winner—although it may be prudent to review the uses to make sure they are all legitimate ones. This task illustrates, in most cases, social loafing, for some groups perform quite poorly on this activity, as the members fail to exert very much effort during the idea-generation process.

I complete the learning cycle, following an analysis of the experience, by asking students to complete a short written assignment that helps them link their experiences in the groups to such concepts as decision schemes, social loafing, and the value of combining multiple viewpoints when making a decision. Such an assignment could include such questions as: Which task was additive? How well did your group perform on this task? Were any of the variables that increased social loafing, such as free-riding, social matching, and blocking operating in your group? Which task was compensatory? On this task was your group’s score more accurate than your personal score? Would you recommend using groups to solve compensatory problems? “Which tasks were disjunctive? Describe, very briefly, the processes used by your group to solve the disjunctive tasks.”

**Ideas for Additional Group Activities**

The Task Challenge Activity has proven itself to be an effective means of teaching students about group processes, for it effectively uses the group experience to communicate information about an important conceptual principle. Like the other activities that are sampled in this section, such experiential activities help students become more engaged in the learning process while at the same time stimulating them to think more deeply about the very phenomena they are examining academically.

**Social Loafing in Learning Groups**

Meyers (1997) reviews a number of critically important issues to consider before undertaking a group activity, particularly when one hopes the activity will increase student engagement. As he notes, student groups, like all groups, are subject to process loss due to social loafing: the reduction in effort seen when individuals work on collective projects. Meyers suggests a number of steps to take to minimize social loafing in student groups, including selecting tasks that are challenging ones for students (and hence require a group approach) and personally engaging. Meyers also notes that research indicates that social loafing become less likely when individual contributions to the task can be identified, so he recommends that some method be used that rewards students individually rather than only collectively. With these recommendations in mind, Meyers then reviews 68 articles published in the journal *Teaching of Psychology* that describe the use of a small-group learning activity, identifying those that maximized engagement by minimizing factors that may trigger social loafing.


**Key Group Leadership**

Mathis and Tanner (1999) describe the Key Groups activity as a means of helping students overcome worries about leading their group. Mathis and Tanner first make certain that students have an understanding of the leadership role, including basic skills and competencies. They then randomly assign students to groups that meet enough times so that all the members have the opportunity to be the group leader at least once. They also use a specific task in the group session: The groups develop the answer key to be used in grading a 7 to 10 item test that the students have already completed as individuals. After the group completes the key task, members then spend time providing feedback to the leader, and the leaders provide group members with feedback as well. Students also develop a short self-evaluation on the basis of their contribution to the group. Mathis and Tanner report that the students felt the exercise helped hone their leadership skills and increase their leadership confidence.


**School Spirit and Group Cohesion**

Reifman’s (2004) study of school-level cohesion can be replicated by recording students’ apparel and their willingness to display the school’s name on their automobiles. Reifman, working with colleagues at 20 different universities, used a variety of direct and indirect measures, including coding students’ apparel for evidence of university-affiliation, counting school decals in the student parking lots, measuring closeness with the university, and a modified version of the Collective Self-esteem Scale to measure school spirit. Reifman found that these indexes were relatively well-correlated and that the activity helps students better understand the use of indirect measures of social processes. This activity for a course in group dynamics illustrates the degree
of diversity possible in larger collectives, including colleges, communities, or even nations.


Violating Social Norms

Schneider (2002) suggests teaching students about the emotional impact of violating common social norms by asking them to violate a common norm in at least 2 different settings. Before the assignment, he reviews the nature of norms and provides students with guidance in how they should react if other people show annoyance during the norm-violation activity. To minimize the possibility of any harm being done to either the student or the bystanders, Schneider assigns each student a norm to violate from a list of various social norms. He does not permit students to pick the norm they wish to violate, and this guideline should not be relaxed as students have been known to choose unwisely if given the freedom to select their own norm violations.

Schneider uses multiple norms to vary students’ interest in the project, and his list includes (2002, p. 37) “clip your toenails while sitting with others in a cafeteria,” “with hair tousled, ask to borrow a comb from a group of strangers,” and “ask people in a movie line if you could move ahead of them.” Schneider has students write an extensive analysis of the experience in which they provide analyses of the concept of norms, described their own norm violation experiences, and examine their thoughts, feelings, and behaviors before, during, and after the experience. He also allows students to only imagine they have performed the norm-violation activity but asks those students to explain why they could not carry out such a simple request.


Stimulating Group Formation

Ellis and Kelley (1999) and Lewis and Gurung (2003) use a matching simulation to study how people select partners in dyadic relationships. They give students cards with values that indicate the holder’s social worth, but the students can only see others’ cards and not their own. After being told to try to be part of a pair with a high value, they then try to form pairs with others in the room. To modify their method to demonstrate group formation, the instructor randomly assigns each student a number from 1 to 30 and has each student (without looking at the number) place the number on his or her forehead or back. He or she then tells the students to form groups with as many as 5 members, but also let them know that the winning group—the one that will receive some sort of bonus—will be the group whose members’ numbers sum to the highest value. If the results match those reported by Ellis and Kelley (1999) and Lewis and Gurung (2003), groups will tend to be high in homophily; the members will be similar in value. Ellis and Kelley (1999) have also used adjectives, affixed to students’ foreheads, rather than numbers. They offer a variety of suitable adjectives that vary from positive (e.g., smart, social, spirited) to negative (e.g., cowardly, cruel, bigoted).


Demonstrating Obedience

Hunter (1981) demonstrates obedience with the help of a colleague who is not known to the students (such as a fellow instructor). Instead of going to class himself, the instructor sends in a colleague, who acts as an authority. This confederate enters the room just as class is about to start, and with an air of confidence tells students to move up and fill empty seats near the front of class. If students do not move, then he or she takes a more commanding tone and say such things as "I cannot continue unless I get cooperation." He or she can also point to particular students who are seated in the back of class and order them to the front. The confederate can then make additional requests, which escalate from the surprising to the ridiculous. The course instructor then enters the room and ask what is going on. When the intruder realizes he or she has entered the wrong class and leaves, the course instructor can ask the students why they obeyed the stranger’s commands. This activity requires a careful debriefing.

Snyder (2003) describes a related method for introducing the analysis of obedience. On the day when he discusses obedience in class, he places on his syllabus the statement “Bring an Empty Soda Can to Class!” In class he asks all students who brought a can to place it in their left hand. He then asks all students who feel that they would refuse to obey an authority to raise their right hand. He then asks the students to also raise their left hands, and asks them “Why are you holding an empty soda can?”

**Demonstrating Social Impact**

Dynamic social impact theory identifies four basic tendencies that emerge during group discussion: consolidation, clustering, correlation, and continuing diversity. Consolidation, for example, is tendency for the majority faction within a group to increase in size over the course of a discussion. Harton and her colleagues describe a classroom activity that they use to demonstrate all four processes (Harton, Green, Jackson, & Latane, 1997). They ask students to answer several multiple choice items working alone, but then to review and possibly revise their answers after talking to the two people sitting on either side of them. They then examine the changes in students’ answers and calculate the percentage of students who change their answers. Clustering is also apparent in their responses, for students tend to agree with those seated near them. Students within clusters also tend to give the same answers as one another on other items (i.e., correlation), and some individuals refuse to change their answers even though no one else agreed with them (i.e., continuing diversity).


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**Experiential Learning about Groups:**  
**Conclusions**

The use of group-level learning activities in a course on group dynamics is doubly justified. Whereas students may misunderstand the purpose of such activities when they are used in other kinds of courses—thinking they are merely pleasant distractions from the usual class routine of lecture and discussion—in a course that deals with theory and research on groups such activities create and demonstrate within the confines of the classroom the very phenomena being studied in the course. These activities are not just “fun and games” in the classroom, but a proven means of engaging students in their own learning by helping them apply course concepts to their own experiences.

**References**

Engaging Students in Psychology and Law: An Exercise in Jury Selection

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Perry, Huss, McAuliff, and Galas (1996) described an active learning experience for a psychology and law class involving a mock trial. Although others have expanded on the experience (e.g., Werth, Harvey, McNamara, Svoboda, & Gulbrandsen, 2002), we would like to discuss one activity that can be used in conjunction with the mock trial or as a standalone activity. The voir dire, or jury selection process, can serve as an important precursor to the mock trial by encouraging students to actively immerse themselves into the experience and become participants. We begin by describing the voir dire activity in detail by outlining the process and describing a variety of benefits and difficulties involved in using this activity within a classroom setting. Additionally, we present an up-to-date annotated bibliography of activities useful in psychology and law courses of all types.

In many ways, psychology and the law is a topic area that lends itself to student engagement; the topic concentrates on crucial philosophical, legal and ethical issues, and encourages application to real-life events. Whether professors structure their courses around clinical aspects, non-clinical issues, or the field as a whole, applying the material within a mock trial is one way to promote active engagement and encourage the development of critical-thinking skills both inside and outside of the classroom. Perry et al. (1996) describe the mock trial as an entire class activity based upon real case law in which class members take on crucial roles within the trial. Students work together to create well-developed arguments based upon case facts drawn by the professor from an actual case. Students quickly become deeply involved in the process of the mock trial, frequently meeting with each other outside of normal school hours and contacting court officials as additional resources for the case (Perry et al., 1996). Furthermore, students show improvement in their critical reasoning skills as well as their motivation for class participation.

Although the mock trial itself is a valuable learning tool for achieving student engagement, the addition of a voir dire can provide participants with additional insights into the trial process and serve as a spark to prepare them for the mock trial. The voir dire is the process by which the courts select prospective jury members. We recommend involving students from the department research pool as prospective jurors, if possible. We normally recruit 36 student participants from the research pool. We ask prospective jurors to report to a classroom on a given day and time in order to participate in jury selection for a mock trial in a psychology and law class. We set up the room to loosely resemble a courtroom setting with tables and chairs set up for the two opposing teams at the front of the room and seating for the jurors at the back of the room. Upon arrival, prospective jurors check in and receive a number to attach to the front of their shirts. After they are seated, the two opposing teams, defense and prosecution/plaintiff, give the prospective jurors brief questionnaires that have been screened ahead of time by the instructor to make sure all questions are appropriate. After all the prospective jurors have arrived and both teams are ready to start, the process of selecting jurors begins.

The instructor serves as the judge for the day and instructs the class and the prospective jurors about the order of events for the class period. Each side alternates asking questions in three minute periods of time. The three minute time limit allows each side the opportunity to discuss issues in confidence with the entire team, while at the same time controlling the available time for the activity. There is nothing specific about the three minute period, and the blocks of time could certainly be increased a couple of minutes without many problems. However, our experience has been that three minutes provides an optimal period given the changing demands of the process as it continues from beginning to end. We normally allow the prosecution/plaintiff to begin the questioning and the two teams alternate back and forth asking questions to the jurors. Only members of each team who have volunteered for the role of voir dire attorneys, usually two per team, are allowed to ask questions of the jurors to reduce confusion and move the process along in an orderly fashion.
Each side may ask group or individual questions without prior knowledge about the jurors or in response to the jurors' answers on the pre-trial questionnaires. The judge (i.e., the instructor) discourages the class from asking about potentially sensitive topics or from asking questions in a way that requires the prospective juror to disclose difficult experiences from his or her life. If the judge deems questions inappropriate or irrelevant, the judge bars those questions. Voir dire attorneys are allowed to communicate with their team and their team with them during questioning. Normally, one attorney poses questions to prospective jurors while the other attorney confers with the team or organizes the information they collect about each juror through their questioning as well as the opposing team's questions.

Each side can remove a juror at any time either for cause or by utilizing a peremptory challenge. Removing a juror for cause is rare, however, and would only occur in instances in which it was obvious that jurors could not be unbiased. In 15 years of performing this activity, strikes for cause have only been successful two times. Normally, voir dire attorneys choose to use one of their limited numbers of peremptory challenges to remove a juror they believe would be detrimental to their case. Each side must ask the judge for permission to excuse a potential jury member whether for cause or for using a peremptory challenge. Although both sides normally receive an equal number of peremptory challenges, the total number of prospective jurors who have shown up to the voir dire ultimately determines the number of peremptory challenges allotted per team. In essence, both sides receive the number of peremptory challenges that allows a final jury of 12 to sit for the mock trial. Therefore, if 36 prospective jurors show up, each side gets 12 peremptory challenges. If an odd number of jurors (e.g., 33) presents for the voir dire, the defense obtains the additional peremptory challenge. Each side can strike jurors at any time during the process.

There are many benefits to enacting the voir dire. It is an active learning process that promotes student involvement and application of the psychological research. Students have a much better understanding of the process from all sides after experiencing it. In addition, it acts as a realistic preparation for the trial that occurs in which students have to make decisions spontaneously in front of live jurors. We have heard of other teachers using students from their own class to serve as jurors; however, we highly recommend using a more naïve pool of prospective jurors that can offer a more ecologically valid experience for the class. When paired with the mock trial, this activity allows the class to review the video tape of the jury deliberation in the context of their earlier choices during the voir dire, encouraging class discussion and reflection of the activity. For example, we ask whether jurors expected to be favorable to a specific side turn out to be favorable for that side. The voir dire serves as a wonderful impetus to get both teams organized and makes the impending mock trial much more salient and immediate to the students. Finally, this activity can also serve as a standalone activity.

We have heard several anecdotal reports about its use as an in-class activity over several class sessions with similar success. Students simply need a set of case facts from which to base their decisions about a perfect jury for either side.

Although there are numerous benefits to the voir dire, there are a few difficulties and aspects that should be examined, given the limitations of a particular class. First, there is the potential problem of completing the process in one class period. It is essential that the instructor or judge monitor time and keep the process moving along. We conduct the voir dire in one extended 50 minute class period. We normally ask jurors to arrive 15 minutes prior to our scheduled 50 minute class in order to check them in and get their responses on the pre-trial questionnaires. Only once has a class started to run up against time, and this occurred because both teams of attorneys were poorly prepared. In classes of 120 minutes or even longer, timing would be no problem. Lastly, there may be ethical concerns about questioning the volunteer jurors as real people. Although it is important to keep the process as authentic as possible for optimal learning and engagement, it is also necessary to remember that the potential jurors are real people who may have family members with similar experiences or have been victims of a crime themselves. Discussing this issue with the class before the voir dire begins and ruling out questions that are phrased in an insensitive manner have eliminated potentially uncomfortable moments and there has never been an instance where a prospective juror voiced concern during or after the process. This consideration is especially important because this activity does not come under the review of an Institutional Review Board because it is a class activity and not human participants research.

We recommend this activity to faculty teaching upper level courses in psychology and law or forensic psychology. Generally speaking, this activity works the best in classes with fewer than 30 students. However, modifications could create opportunities for a larger class without many problems. Through this exercise, we believe students obtain an active learning opportunity that increases independent critical thinking and provides a realistic depiction of psychology within the legal system. Upon the
conclusion of the voir dire, students anecdotally report greater insight into the jury selection process, appear to gain confidence in the application of psychological research to real life events and seem understand the importance and influence of the voir dire on the outcome of a trial.

**Annotated Bibliography of Activities**

We selected activities after an examination of the available literature on psychology and law related classes. We placed the activities in alphabetical order along with a brief description to give the reader some idea of their content and potential for use in psychology and law related classes.

This article introduces an exercise which utilizes feature films to assist students in identifying legal doctrines and research to critique the accuracy of the films’ depictions as well as analyze the psycholegal issues within the films. The article provides information on how to integrate the films within the classroom and how to facilitate film discussions. The author identified three films as particularly valuable for the exercise as well as a list of other relevant films. The author additionally provides a variety of benefits and risks associated with using the activity and offers suggestions on how to prevent these risks in future demonstrations.


The authors evaluate the advantages of using focus groups in planning strategies for trial. The activity provides background information on the current uses of focus groups within the legal system, including how attorneys utilize focus groups to obtain a variety of possible explanations and viewpoints regarding their cases. There are two goals to be achieved through this activity: to demonstrate how social science can provide attorneys with a prospective juror’s point of view of a case and for students to learn what is involved when individuals perform as a team. The article provides instructions on how to assign students to teams, roles, how to conduct the trial, and how to conduct focus groups. The authors also offer an idea for activity evaluation through focus group reports. Each final report includes theory and research in legal and social psychology as well as activity reflection questions.


The author describes an evaluation of an eyewitness memory demonstration used within an undergraduate class on memory. The demonstration addresses the question of whether or not making students witnesses facilitates learning about eyewitness memory. The article provides a description of the target event and two subsequent phases of testing the memory of the students. Phase 1 occurred two weeks after the target event, while Phase 2 occurred 7 months after Phase 1. The students received the same thirteen questions in both phases. The article offers results from the original activity and a discussion session evaluating the demonstration and some of its limitations. It explains two limitations exposed during the activity and provides related suggestions that teachers could incorporate into future demonstrations to avoid these limitations.


The author addresses concerns regarding minority influence, group polarization, and normative influence through a brief jury simulation. A short exercise designed to last only a single class period, the case design initially convinces every juror to choose a “guilty” verdict. However, two confederates persuade the majority group to agree with the minority “not guilty” group. The article provides instructions for confederates, specific details of the entire case, discussions questions for the class, and a lecture guide including important points to be taken from the simulation.


This article provides background information on psychology and the law and why these two areas tend to conflict with each other. The author invites teachers of psychology and the law to illustrate the conflicts of the two fields through providing a set of documents from a real case in which the two professions disagree. The author recommends *Roper v. Simmons* (2005) as a case in which the two professions disagree about the fundamentals of the facts, the understanding of the case, and the recommended outcome. The author provides both general instructions and specific instructions for the exercise as well as specific discussion questions for the students and a lecture guide for discussing the questions as a class.


The author describes an in-class demonstration in which either undergraduate or graduate students attempt to simulate a mental disorder while
completing the Emotional Distress Scale (EDS) psychological inventory. The author provides an example role play situation and instructions on how each student is to complete the 69-item EDS form. Instructions indicate how to score the EDS form and what each score signifies. The article also mentions guided discussion questions regarding the topics of test development and research design issues as well as professional and legal issues. Additionally, the author mentions ways in which the class discusses ethical questions regarding labeling within applied settings. The article furthermore includes variations and modifications for the activity.


This article depicts an engagement activity which is useful in introductory psychology, psychology and law, and abnormal psychology classes. It encourages students to apply psychological theories and concepts to the teachings in class. The article also mentions multiple cases in which many relevant psychological issues can lead to classroom discussion. The author provides character descriptions for five different people who have all taken the life of another or harmed another but have extenuating circumstances which makes the culpability decision difficult. The activity takes approximately an hour and a half. Lastly, the article includes a data-based evaluation of the activity as well as discussion of the benefits and improvements for limitations mentioned by the author for the activity.


This article presents an intriguing exercise for a graduate psychology and law seminar spawned by the perspectives of a professor as well as a student within the seminar. The article includes an example case (Thompson v. State, 1977; Thompson v. Dagger, 1987; Thompson v. McNeil, 2009), background information on the case, and the professor’s reasoning behind the activity. The activity asks each student to choose a paper topic provided from a list in the article, conduct a literature review, take a position on the basis of the review that supported either the petitioner or responder, and prepare an amicus curiae brief. In learning about the case, the students reported that they became intrigued by the real facts they were discovering and they searched for more information. They came across a pen pal request from the defendant himself. As a class, they began sending letters to the defendant, asking about events in the case, relevant psychological topics, and life on death row, and students utilized the information they received to write their briefs. This active learning exercise can help to encourage students to look for more information and apply the theories to real-world situations.


The author provides an activity that serves as the conclusion of a semester long course in psychology and law. In this active learning exercise, students serve as advocates for a specific party in a legal case and must find and present the best empirical psychological evidence to help that party win. The activity works effectively with 8 to 20 students in the classroom. The author provides information on amicus curiae briefs and includes cases in which amicus curiae briefs were utilized by psychologists. The author additionally offers topic ideas as well as information on formulating case descriptions. Through questionnaires, the author found that this exercise helps students to condense a large amount of empirical data into a concise and organized analysis.


This manual offers a comprehensive review of activities that parallel the chapters in Wrightsman, Nietzel, Fortune, and Greene’s Psychology and the Legal System textbook (not the most recent edition of this particular text). Activities explored include ideas for debates and discussion questions, personal interviews, in-class speakers, public opinion surveys, out-of-class observations, videos, deliberation re-enactments and media analyses. The manual also provides information on how to perform a mock trial and/or mock jury.


The author provides a detailed description of how to create a mock crime and follow through with the legal processes involved in the investigation and trial within the classroom. The activity is a semester-long simulation involving the entire class in both individual and group work. Offered within the article is an exhaustive list of necessary equipment and materials, roles and groups, and a detailed timeline of events needed to ensure a thorough criminal investigation. Lastly, the article provides a list of grading criteria, tangible products, and additional relevant activities to supplement the simulation.

Originally developed for Forensic Psychology doctoral students in an Experimental Psychology and the Law course, this activity uses the biographies of prominent researchers to help students familiarize themselves with the scholars within the field. The authors provide a description of the assignment as presented to the students, asking that each student prepare a presentation about one scholar in the area covered by that week’s assigned articles. The article offers goals of the assignment, including but not limited to, introducing students to important scholars in Psychology and the Law as well as linking the research with the people responsible for the work. The article also includes additional beneficial teaching outcomes not initially anticipated by the authors, including exposure to more history of the field, opportunities to learn about more areas of research not covered within the class and professional development, as well as improvements for the biography assignment.


The authors provide an overview of active learning within a psychology and law class as well as the importance of active learning within the education system. The authors additionally provide an outline for teaching a psychology and law class using active learning—a method of teaching which utilizes hands-on classroom experiences. The article includes information on class size, class objectives and class topics in addition to descriptions of active learning projects, including an action project in which students either attend a trial or interview three people within the legal system, current event analysis, oral arguments, and a mock trial. The authors found that students learned the content and earned average or higher scores on quizzes, papers, and exams than previous classes.


The author offers an active learning activity using fictional screen media and its portrayal of forensic professionals in order to help students apply what they learned in class as well as to identify how the screen media may affect people’s understanding of forensic issues. The author provides examples of topics for the assignment as well as offers information on creating presentations, conducting self and peer evaluations, and utilizing grading criterion.


This article describes an activity for undergraduate psychology and law students using the Jack Kevorkian euthanasia case for a controversial mock-trial. The article provides a summary of the case, pretrial preparations, trial procedures, and the mock trial. It also includes data from student questionnaires and student papers, which allowed for discussion and review of numerous aspects of the trial process. From these student observations and suggestions, the author identified limitations as well as recommendations for better use of the trial. This article provides an activity in which students receive the opportunity to discuss and examine a variety of issues as well as form strong beliefs, promoting strong psychosocial arguments on multiple perspectives.


**Conclusion**

We hope that these articles are useful for instructors teaching psychology and law or psychology and law related topics. Some instructors may find particular activities more useful given the parameters of their existing courses or their own training or pedagogical inclinations. We encourage instructors to think about not only the utility of each activity but the application to each unique classroom experience and instructor.
Engaging Students in Applied Social Psychology

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The purpose of this chapter is to provide readers with materials, demonstrations, and other activities designed to engage students in an applied social psychology course. Before reviewing these materials, it is important to define what we mean by applied social psychology, particularly in contrast to social psychology, and student engagement. Social psychology is the study of how people think about, evaluate, influence, and respond to others (cf. Aronson, Wilson, & Akert, 2010; Gilovich, Keltner, & Nisbett, 2010; Taylor, Peplau, & Sears, 2006). Applied social psychology is the application of social psychological theories, methods, and research findings to a social problem (cf. Schneider, Gruman, & Coutts, 2005; Schultz & Oskamp, 2000). Given the goals of this chapter, we focused on the materials, demonstrations, and activities that students can readily apply to social problems. We excluded from our review materials, demonstrations, and activities that illustrate social psychological theories, principles, or research findings.

For our purposes, student engagement refers to the learning opportunities provided in an applied social psychology course that lead to a variety of desired outcomes including but not limited to knowledge acquisition, critical thinking, persistence, and mastery. Our definition is derived from Kuh, Kinzie, Buckley, Bridges, and Hayek (2007) who wrote:

Student engagement represents two critical features. The first is the amount of time and effort students put into their studies and other educationally purposeful activities . . . the second component of student engagement is how the institution deploys its resources and organizes the curriculum, other learning opportunities, and support services to induce students to participate in activities that lead to the experiences and desired outcomes such as persistence, satisfaction, learning, and graduation. (p. 44)

Although our definition of student engagement is very broad, encompassing such activities as undergraduate research, practicum, internship, and field experience, we focus on activities that engender student interest in an applied social psychology course through either in-class demonstrations or class project activities.

Over the past decade, we have conducted exhaustive searches for materials, demonstrations, and activities that could be used in an applied social psychology course; unfortunately, we found relatively few. Because of the paucity of class demonstrations and activities currently available for adoption, we developed several of our own; two of which we describe here. In one of our courses, we had students create and maintain a personal blog; in another course, students participated in a service-learning project where they could apply their knowledge and skills learned in the classroom to a real-world problem in their community. In the following sections, we present two activities we developed and then share the results of our most recent search of the literature, textbook publisher websites, and online teaching resources websites done for this review.

Personal Blogs

As an example of how blogging might be used, consider that most applied social psychology courses have a unit on social psychology and health that includes depression as a topic. The World Health Organization (http://www.who.int/mental_health/management/depression/definition/en/) projects that by the year 2020 depression will become the second leading contributor to the global burden of disease. Martin Seligman, one of the founders of positive psychology, the study of human strengths, described several techniques which have been demonstrated via placebo-controlled, experimental research to increase the positive emotions and behaviors that are antithetical to depression. These behaviors then promote happiness and vitality (Seligman, Steen, Park, & Peterson, 2005). We incorporated three of these techniques into one of our courses to provide an example of the application of social psychological theory to a social problem. An added benefit is that these techniques illustrate methods that students can readily apply to their own circumstances.

After students received training on creating and maintaining a personal blog using the Penn State
Blog platform, we gave three assignments, due during the first, second, and third segments of the course. (For a more detailed explanation of these techniques, see Seligman et al., 2005.) By distributing the assignments throughout the semester, we ensured that students had ample time to complete each. The first assignment is referred to as Three Good Things; at the end of every day for three weeks, right before sleep, students recalled three good things that happened that day. They considered even the smallest positive event that went well. Each day, students recorded their list on their blog. In the second assignment, Signature Strengths, students took the Signature Strengths Test (available at http://www.authenticity.org) and posted their results on their blog. We asked students to use one of their top strengths in a new and different way every day for a week. During the week, students posted their activities daily on their blog. For example, they could think of something they disliked doing at their workplace and then use one of their top strengths to make this activity more engaging and meaningful. In the third assignment, Gratitude, we instructed students to write a 300 word testimonial—a letter of gratitude to someone who has been a positive influence in their life, but whom they had not properly thanked. Students posted this letter on their blog.

An important feature of Penn State blogs is that students have the option of making their blogs public or private so that only the course instructor has access. This is important as much of the information in the blogs is of a personal nature. Of course, instructors could assign these techniques in the more traditional written format. However, an advantage of using blogs as the platform for student assignments is that students were required to add entries daily. In this manner, we were able to monitor these updates every day, which made blogging an attractive option. Seligman and his colleagues (2005) found that the three techniques reviewed increased happiness and decreased depressive symptoms. Our experience is that most of our students did not continue to maintain their blogs beyond the end of the semester; however, in a follow-up one year after the course was completed, almost all reported that they have continued using the techniques.

Service-learning Projects

In another course, we used service-learning to engage students in a community problem. Although universities are often involved in their communities, many volunteer opportunities lack the structure for students to reflect on the activity so that they gain a more complete understanding of course content (Howard, 2003). Service-learning, on the other hand, directs students to reflect on the nature of the outside classroom activity and integrate it with elements of traditional course curriculum. What follows is a description of a variety of class projects we designed to immerse students in applied social psychology.

The projects. Students enrolled in one of our applied social psychology courses have worked with six communities that are adjacent to the campus as well as for the campus chancellor’s office. External projects included: collecting and analyzing data for two cities’ comprehensive plans that addressed transportation, utilities, land use, recreation and housing needs (for a detailed review of one of these projects, see Harnish & Bridges, 2004); assessing stakeholder needs for a community redevelopment project; evaluating the feasibility of building a minor league baseball park in a nearby city; performing regional economic development planning which brought together all of the campus’ surrounding community partners; and measuring member and non-member perceptions of a senior center. The internal chancellor’s office project assessed interest among students for new four-year majors at our campus.

Pedagogy. In our senior-level applied social psychology course, we employed the experiential learning theory of Kolb (1984) as a framework for the course. First, we exposed students to abstract conceptualization (i.e., learning the course curriculum), followed by reflective observation (i.e., formal writing assignments), active experimentation (i.e., how the course information can be used to solve a social problem), and finally, the concrete experience (i.e., the service-learning project). Students achieved abstract conceptualization by critically reading the assigned texts that provided training for the specific technique used during that semester. Reflective observation centered on student-led class discussions during which an assigned student discussion leader asked fellow students to explain and illustrate concepts from the readings (for details on the student-led seminar method, see Casteel & Bridges, 2007; Casteel, Bridges, & Harnish, 2009). We found this to be an effective engagement technique in a variety of upper-division psychology courses. Active experimentation involved creating a research proposal, research materials, and a written report for the community partner. Upon agreement between the class and the community, students began the project (i.e., the concrete experience in Kolb’s model).

Procedure. Because of the complexity of the projects, normally the entire class worked on one project during the semester. We used all 15 weeks of class time to complete the project. In Table 1 below,
we present a typical schedule which describes the class topics and corresponding class activities. The classes met twice a week for 75 minutes during a 15 week semester.

Table 1. Schedule for Service-Learning Project

<table>
<thead>
<tr>
<th>Week</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Definitions, theory and methods of applied social psychology are reviewed</td>
</tr>
<tr>
<td>2</td>
<td>Community partner presents overview of the service-learning project</td>
</tr>
<tr>
<td>3</td>
<td>Readings and discussions on methodologies that could be applied to the social problem</td>
</tr>
<tr>
<td>4</td>
<td>Students write a research proposal that details how the social problem will be addressed</td>
</tr>
<tr>
<td>5</td>
<td>Proposal is submitted to Penn State’s Office for Research Protections (IRB) for review</td>
</tr>
<tr>
<td>6</td>
<td>Develop the sampling frame and sample for the project</td>
</tr>
<tr>
<td>7</td>
<td>Create the dependent measures</td>
</tr>
<tr>
<td>8</td>
<td>Community partner presented with the research proposal and supporting materials</td>
</tr>
<tr>
<td>9</td>
<td>Comments from the community partner are received and changes, if any, are made</td>
</tr>
<tr>
<td>9</td>
<td>Approval for the use of human participants is obtained</td>
</tr>
<tr>
<td>10</td>
<td>Preparation for the project (e.g., copying, assembly, etc.) and data collection begins</td>
</tr>
<tr>
<td>11</td>
<td>Data collection ends</td>
</tr>
<tr>
<td>12</td>
<td>Data coding, and data entry begins and ends</td>
</tr>
<tr>
<td>13</td>
<td>Data analysis begins and ends</td>
</tr>
<tr>
<td>14</td>
<td>Students write a report to be delivered to community partner</td>
</tr>
<tr>
<td>15</td>
<td>(“Buffer” week for any slippage in schedule)</td>
</tr>
<tr>
<td>16</td>
<td>Presentation is scheduled with the community partner during the final examination period for the course</td>
</tr>
</tbody>
</table>

Note: Because the projects we have undertaken fall within the “expedited” category for IRB review at our university, IRB approval of the project is granted within two to three weeks. Other institutions may have different turn-around times.

Course evaluation. Near the end of each semester, students evaluated the course. Since we began using this approach in 2004, students have rated the course very positively in terms of our key measures. Our scores were above University-wide mean ratings for “quality of course” and for “quality of instructor.” In addition, students commented that the projects were helpful in connecting social psychological theories, principles, methods, and findings to real-world problems.

Annotated Bibliography

We performed an exhaustive search to include others’ work in this review. We conducted a literature search using PsycINFO and Penn State’s electronic catalog (The CAT) of material (over 5.3 million entries) held by its libraries for journal articles or texts on teaching applied social psychology. In addition to journal articles and texts, we explored online teaching resources. Specifically, we examined textbook publisher websites for instructor resource manuals, and several online teaching resource websites [i.e., Society for the Teaching of Psychology (http://teachpsych.org/index.php), CROW – Course Resources on the Web (http://jonathan.mueller.faculty.noctrl.edu/crow), and Social Psychology Network (http://www.socialpsychology.org/)].

Below, we present an annotated bibliography for the results of our searches. We found no other texts, chapters, journal articles or websites that provided materials, demonstrations, or activities designed to apply social psychology theories and methods to social problems.

Textbooks

Textbook with class activities on applied psychology. Despite the abundance of texts, only the Kremer, Sheely, Reilly, Trew, and Muldoon (2003) text provided a framework for understanding how social psychology impacts our everyday lives by presenting applications of social psychological knowledge to the environment, workplace, health, peace and conflict, communication and the media, education, economics and consumerism, crime and law, and sports. Each chapter provided two to five in-class activities that asked students to apply what they have learned in the chapter to a social issue.


Handbook Chapter

Exit survey for graduating seniors. In this chapter, Sattler, Back, and Pollitt (2000) presented the method by which students designed and implemented an exit survey of graduating psychology majors for the College of Charleston’s psychology department. A week by week schedule provided details on activities undertaken including setting goals for the survey, identifying the population, developing a sampling plan, developing and
implementing the survey, analyzing the data, and reporting the findings.


**Journal Articles**

**Redesigning public service announcements.** In this paper, the authors described how students in an introductory social psychology class redesigned a public service announcement so it would be more effective. Although the assignment described did not involve working with an organization on a public service campaign, the procedure described in the article can be readily adapted for use with a variety of community organizations (e.g., local food banks, animal protectors/shelters). Students reported that the exercises helped them understand the concepts involved in attitude change and persuasion, and that they found the activity to be an enjoyable way of learning the course concepts.


**College students as auxiliary math teachers.** This article illustrated how students enrolled in “Field Work in Applied Psychology: Teaching Mathematics” applied principles from cognitive, developmental, and educational psychology to supplement fourth, fifth, and sixth grade math instruction. Elementary students’ math scores increased and the undergraduates who conducted the tutoring reported the activity was personally satisfying.


**Service learning for social justice.** In this activity, students participated in community organizations, such as women’s shelters or soup kitchens, or with more large-scale social justice organizations, such as Amnesty International, the ACLU, or Greenpeace. Students spent class time in discussion about their participation and kept a journal describing their service. The activity increased students’ understanding of society’s influence on poverty and homelessness, and many students continued to volunteer after their required class participation ended.


**Websites**

Only the Social Psychology Network presented activities that could be used in an applied social psychology course. Despite the large number of activities on the site (n = 20), only seven addressed solving social problems.

**Putting positive psychology into action.** In this project, students actively volunteered for community service. Students assisted nonprofit organizations utilizing theories from positive psychology. Students kept a journal recording how they felt during this assignment; they wrote before and after their service, and completed mood measures before and after their service. At the conclusion of the project, students wrote a paper explaining the terms and theories of positive psychology that they employed during the project. Students reported that their positive emotions increased while negative emotions decreased over the course of the service-learning project. Additionally, students noted that they obtained a deeper learning of the course material because of the project.


**Financial education for refugees.** This article described an activity in which students assisted refugee families in creating bank accounts and managing finances. Students kept a journal that documented their thoughts about ethnocentrism, stereotyping, and prejudice during the course of the project. Students gave positive reviews of the project and noted how meaningful the experience was. In addition, students reported that they gained a heightened awareness of the large number of refugees living within their community, and their needs.


**Reducing youth violence.** Students interviewed community residents, professional leaders, and government officials, helped neighborhood clean-ups, and visited youth centers in order to understand youth violence. Students promoted social change through their efforts. For example, some students wrote letters to officials about what they had learned and asked for help to decrease youth violence. Others wrote to newspapers expressing their opinions and presenting information gleaned from interviews conducted with community, professional leaders, and government officials. Students noted that the activity broadened their perspectives on youth violence, promoted their
analytical skills, and that they became more engaged in their community.


Research for community action. In this example, students participated in a service-learning project. The author discussed a social marketing campaign to change food choices among college students. Results of the student-led campaign improved diets among those eating at a campus dining hall. Students valued the project, so much so that they recommended using the project in future classes because it helped them understand the research methods used to evaluate the social marketing campaign.


The following activities addressed specific ethnic conflicts or aftermaths of natural disasters; however, the activities could readily be modified and applied to other interpersonal conflicts (e.g., gangs and gang violence) or natural disasters.

Reconciliation in Rwanda. The activity described action teaching (i.e., linking teaching to social issues) to promote reconciliation in Rwanda. Participants in the project taught the public about the psychology of violence, trauma and healing, and how to apply this body of research to create change. Those engaged in the activity used a variety of media (e.g., soap operas and direct instructional programs) to model prosocial behavior. Participants showed fewer trauma symptoms, and increased positive attitudes toward the outgroup.


International Tsunami museum. This project was designed to promote mental health after the trauma of the December 26, 2004 tsunami that struck 12 countries bordering the Indian Ocean. Students created educational exhibits for the museum; through their work, they promoted education, mental health, social awareness, and compassion. Students noted improved critical thinking skills, a better appreciation for research, and an increased sense of social responsibility upon completion of the project.


Fundraising for Hurricane Katrina victims. Students conducted fundraising for the victims of Hurricane Katrina and the persuasion techniques used in the effort. Students used the foot-in-the-door technique, door-in-the-face technique, reciprocity, and direct order technique to raise donations for Hurricane Katrina victims. Upon completion of the fundraising, students indicated a greater connectedness to the communities impacted by Hurricane Katrina.


Conclusions

The methods we described provide a means for students in applied social psychology courses to increase their knowledge acquisition and skill set. As Edgerton (1977, p. 31), noted, “Understanding is the ability to explain the idea, muster evidence to support it, find examples, apply it to new situations, generalize about it and represent it in new ways. In essence, the kind of learning that leads to understanding is learning by doing.” Using the materials, demonstrations, and activities reviewed in this paper should help teachers of applied social psychology facilitate the acquisition of the knowledge and skills undergraduate students will need in order to be successful not only in their academic careers but in their professional careers as well. Indeed, we have found that this has been our experience. Many of our graduates have received employment opportunities as a result of the skills acquired in our applied social psychology courses. We encourage the readers of this chapter to use the materials, demonstrations, and activities we have reviewed, and to create new ones that allow students to apply their knowledge and skills to social problems.
References


Teaching Environmental Psychology: Demonstrations and Exercises

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Patricia A. Romano       Jacob A. Benfield       Gretchen A. Nurse
Colorado State University       Pennsylvania State – Abington       Colorado State University

Environmental psychology is concerned with the interaction of people with their built and natural environments. We provide a history of the field on our chapter website www.colostate.edu/Depts/Psychology/environmentalpsych/supplements.

Today, a course in environmental psychology can incorporate material that is applicable to either the built or natural environment, or to both. Other labels have also emerged that instructors might incorporate in the course. Barker’s (e.g., 1968, 1990) ecological psychology involves a special set of principles (e.g., the behavior setting, staffing) and methods (e.g., field observation) to study how communities or aspects of communities influence social interaction and outcomes. Conservation psychology is a movement that emphasizes the use of psychological principles to encourage conservation and preservation of natural resources (see http://www.conservationpsychology.org). Ecopsychology is a movement that emphasizes therapeutic benefits of interacting with nature (see http://www.ecopsychology.org).

In this chapter we describe exercises and demonstrations that illustrate principles that instructors often teach in environmental psychology courses. Instructors can conduct many of them in the classroom, but others require observation or manipulations in other settings on or off campus. Some are more properly homework assignments that take more time than is available in a typical class period. We have ordered them according to the chapters in the textbook with which we are most familiar (Bell et al.’s 2001 Environmental Psychology), but instructors can use them with any textbook or in a course designed around specific readings. Specifically, the order of our coverage is research methods; nature and human nature; environmental perception, attitudes, and cognition; theories; noise; weather and climate; disasters and toxic hazards; personal space; territoriality; residential environments; institutional environments; work, learning, and leisure settings; and changing behavior to save the environment. In the materials that follow we describe exercises we use on the topics we cover. Unlike most other chapters in this book, we are not describing exercises that we took from published sources with documented outcome data but rather exercises that we created and modified over the years or that we borrowed from other instructors. Supplemental materials, including handouts for students and some additional specialized exercises, are located on our chapter website, www.colostate.edu/Depts/Psychology/environmentalpsych/supplements.

Research Methods in Environmental Psychology

Accretion and Erosion

Environmental psychologists may use any of the research methods that other psychologists use, but there are several types of measures and data collection techniques that are common and easy to demonstrate in the classroom. One measure is accretion, or evidence that humans have used a setting implied through things they have added to it, such as litter, graffiti, fingerprints or footprints, or functional items left behind (e.g., a coat, pen, or book). Another measure is erosion, or evidence that people have used a setting implied through things they have removed from it, including indications of wear and tear such as worn carpet, reduced supplies of paper towels or toilet paper, or missing chairs. We ask the students to be detectives and roam around the current or an empty neighboring classroom or the building lobby and note examples of accretion or erosion that tell them about the activities that have taken place in that setting. We have them note what other aspects of the setting give clues about the
activities that have occurred there. Upon returning to their seats, we ask them to share their findings and list them on the board or projection system. We then collapse their observations into categories according to similarity and summarize all the events that we believe likely happened in the setting even though we did not actually observe the events. For example, some common findings include: everyone in the classroom faced a certain way because that’s the way the chairs or desks are facing; a previous class was chemistry because there are chemical formulas on the board; or someone was bored or inattentive because he/she had time to doodle on the desk. Additionally, finding worn seats or graffiti or litter more often in some parts of the room may indicate differential preference for those areas by certain occupants or environmental cues that permit or promote the behavior.

Behavior Mapping

Behavior mapping is a structured observational technique in which one observes and records behaviors. This demonstration is an example of the research method of field observation. After teaching specifics of how to conduct field observation (e.g., Loomis, 1987), I (Romano) ask individual students to select a setting and to observe it for 30 minutes. Potential settings include the library, food court, or popular student “hang out” or walkway. I ask students to construct an observational template (i.e., a diagram of the setting and a checklist of potential behaviors, including an “other” category with space to add detail). Examples of observations could include the activities that the people present engage in, how often each person in a dyad talks to the other, which direction people turn at a specific choice point (e.g., at the intersection of two sidewalks), or how many people are texting or talking on their cell phones. Students complete their field template along with a brief report about the experience and the setting.

Other Activities on Our Website

We have posted other activities for teaching research methods in environmental psychology on our chapter website (www.colostate.edu/Depts/Psychology/environmentalpsych/supplements). On the website, we include an activity on Experiments, Surveys, Field Research, and Archival/Available Data; one on ABAB quasi-experimental designs; and one on Visual Communication.

Nature and Human Nature

Introduction to Biodiversity Exercise

Only small enclaves of “nature” survive on most college campuses. Should we eliminate native plants, replacing them with groomed zones that are planted and maintained with just one species of grass? Naturalists sometimes formally assess vegetative variety by generating an inventory of the species (even microscopic) in carefully measured plots, a technique that is easily adapted to more informal purposes. This exercise asks students to confront commonly held assumptions, and it can spark discussions about what makes a landscape pleasant, what differentiates a flower from a weed, and whether plant and animal diversity is unsightly or an amenity.

I (Greene) first show slides of well-manicured lawn or forested areas of campus and slides of “wild” areas of campus such as an area behind a maintenance building or along a drainage ditch. I ask which areas are more aesthetically pleasing and why. Photographs can illustrate common “weeds” such as dandelions, familiar “flowers” such as tulips or petunias, and more ambiguous species such as Queen Anne’s lace or ornamental thistles. Students should recognize that labels such as “weed” are often arbitrary. I introduce the following exercise.

In groups of three, students use a 1.5ft piece of string and a stick or pencil to evaluate four pre-identified areas. I recommend two open lawn areas, and two areas with less of a monoculture. Ideally, one of the areas with less monoculture would be a “rain garden” or other planned area with established native species, but any weedy “back” area of campus will work. At the end of the exercise the class reconvenes to discuss findings. Almost certainly, the “weediest” areas show the greatest biodiversity. The discussion can include the class reactions to the aesthetics of the various areas, judgments about the value of plants and animals, and the impact of campus aesthetics on recruitment, quality of life and sense of place. For a copy of a sample student handout, see (www.colostate.edu/Depts/Psychology/environmentalpsych/supplements).

Landscape Assessment Using Slides of Natural and Built Landscapes with Rating Scales

I (Mace) choose a collection of 20-30 images from different types of natural and built environments and present each scene for 15-20 seconds with a computer projector. Students then use bipolar adjective Likert scales (e.g., 1=low, 7=high) to rate each scene on variables such as scenic beauty and preference (see Mace, Bell, & Loomis, 1999). Students then work in groups to calculate means and
Environmental psychologists use TPB to assess very specific issues involving deliberate behavior, so it is important to discuss with students how the survey questions could have different meanings for different respondents. From this activity students realize the difficulties of survey design and question writing.

**Biophilia/Environmental Perception**

Biophilia asserts that we have a natural affinity to elements of nature (Wilson, 1984). Biophobia asserts that we have much to fear in nature (e.g., predators, hazards, and disasters). For a relevant exercise I (Mace) take the class outside to show the application of the biophilia hypothesis and attention restoration theory (see the subsequent Theories section). I choose a semi-natural area on campus that fits the properties of a savanna-type environment, i.e., having a copse of trees or boulders that provides some shelter and a wide surrounding view. I have students spread out and choose spots where they are comfortable and can take advantage of the view. I do not allow them to use phones or computers during the exercise. Students sit in this place for 10 minutes and then record their thoughts or their perceptions. I then direct them to lie flat on their stomachs and focus their attention on the blades of grass or the microenvironments right under their noses. I leave them in this orientation for 10 minutes, after which they jot down their perceptions or thoughts or sketch a scene. Last, I have them flip over and lie on their backs, changing their perceptual orientation to the sky above. Following 10 minutes in this position, I then ask them specifically if they found the exercise restorative and have them reflect on the connections to biophilia.

**Cognitive Mapping**

A cognitive map is our brain’s representation of the spatial environment (see Bell et al., 2001). One approach to helping students understand the concept of a cognitive map is to have them sketch the route they take to get to a particular location (i.e., to create a sketch map; see Lynch, 1960). The location needs to be one that they travel to frequently, such as home, work, or school. Once they have completed the sketch, we (Romano, Nurse) ask them to evaluate their maps. For example, do they rely on landmarks or distance? Did they create the map from an on-the-ground or aerial view? Can they identify paths (i.e., shared travel corridors such as streets, walkways, or riverways); edges (i.e., limiting or enclosing features that are not functioning as paths such as a seashore or wall); districts (i.e., larger spaces that have some common character such as Fraternity Row or
Chinatown); nodes (i.e., major points where behavior is focused, typically associated with the intersections of major paths or places where paths are broken or terminated, such as a traffic circle, a downtown square, or two freeways intersecting); and landmarks (i.e., distinctive features that people use for reference points and that are typically visible from a distance, such as a monument or tall building)? Can they identify common errors in cognitive maps: incompleteness (e.g., major districts or nodes omitted); distortions (e.g., things too close together, too far apart, too big or small, or at the wrong angles); augmentations (nonexistent features added to the map)? They can test for these errors by downloading an aerial photo of the area from popular mapping websites.

**Campus Mapping with Paper Maps of Campus, Colored Pencils, and Tracing Paper**

Although cognitive maps represent subjective memories for environments, graphic maps are also useful for collecting and analyzing spatially distributed information. Increasingly, this information is stored and analyzed digitally as part of a Geographical Information System (GIS). As is true of other computerized data analysis, GIS systems can process huge volumes of spatial information efficiently (Golledge, 2002). To avoid the expense and the long learning process necessary to use typical GIS programs, this exercise gives students a taste of geographical analysis using the important analytic approach pioneered by Ian McHarg (1969).

We (Greene, Mace) print a simple black-and-white campus map for each student and create a color-coded 5-point preference scale (*green*=prefer very much, *purple*=prefer very little, with 3 other colors in between). Each student receives 5 corresponding colored pencils. Students should color their individual map using the scale to represent areas they like and dislike on campus. The instructor asks groups of students to compare maps or even to draw a “combined map” after reconciling their opinions. The instructor then asks the students whether there are landscape features that predict preference. In our experience, high preferences are usually expressed for semi-natural grassy or forested areas on campus and students dislike parking lots as well as certain types of building architecture or function.

To further demonstrate GIS as a decision-making tool, we sometimes extend the exercise by asking small groups of students to consider potential sites for a new outdoor classroom. Using a series of four tracing paper overlays, participant groups create shaded areas they collectively consider to be too noisy, too far from concentrations of potential classes, too sloped or too uncomfortable (e.g., hardscapes such as asphalt or brick are not very “sitable”). If students shade each of the negative factors and all four are overlaid, the remaining “clear” spaces identify potential classroom sites. Sample GIS analysis maps from our own research, which are also useful as space planning tools, can be found on our chapter website. These may illustrate common pedestrian routes, preference zones or areas perceived as dangerous. This exercise is appropriate for sections on cognitive mapping and campus planning and design.

**Theories**

**Arousal Theory**

Environmental psychology involves a number of perspectives used to understand the links between people and their natural or built environments. The Arousal Perspective examines features in the environment that stimulate or overstimulate us physiologically and psychologically (e.g., Dietsbier, 1989). A simple and harmless way to introduce this concept is to have students look at a color wheel on a projected slide and identify the color that they find most stimulating and the color they find the most calming. Color wheels are easy to find on the Internet, and some even include numbers by each color. I (Romano) ask students why they picked the colors they did and then ask what other kinds of stimuli or experiences give them the same reactions. I then ask students to identify a stimulating setting and a calming setting. I then ask if it is the whole setting itself or individual elements in the setting that lead to their reactions. To the extent they choose individual elements, the implication is that by modifying elements within the setting we can design environments to achieve desirable outcomes. Thus, the discussion concludes with showing why designers have different elements in mind when designing a shopping mall versus a doctor’s office waiting room for different levels of arousal.

**Attention Restoration Theory**

Attention Restoration Theory (ART; Kaplan, 1995) proposes that stressful, effortful mental tasks such as a complex class assignment, walking through a crowd, or dealing with a difficult employee decision deplete our attention and lead to directed attention fatigue (e.g., the way a typical student feels after taking the last final exam of the year). ART proposes that we restore our attentional capacity by finding a different, involuntary attention activity that requires little effort, such as a simple fascination (e.g., watching a hummingbird or listening to soft music). A museum visit or watching a pleasant natural scene might provide such a cure.
To prepare for this assignment, I (Romano) create a series of slides that depict a range of natural land, water, or sky photos (e.g., the National Park Service website at http://www.nps.gov has many such photos), and students observe each photograph for the same amount of time (i.e., 5 or 10 seconds). Also, I construct a brief Likert scale questionnaire that asks students to rate the degree to which they find each scene restorative. When students have rated the slides, we discuss their ratings as a class, and then students tell me about places in their lives that they tend to find restorative. I then ask them to assume they plan to move into a new apartment and to consider what window views they would prefer and why.

**Barker’s Ecological Psychology**

Ecological psychology posits that a physical site usually evolves to facilitate the behaviors that are most common in it and that we also modify behavior to fit the constraints of spaces. For instance, instructors may chastise students who are loud in classrooms but encourage boisterous behavior in sports venues. Conversely, over time we either modify buildings to fit evolving behavior requirements or they fail and we raze them (e.g., Barker, 1968, 1990).

A favorite demonstration for me and my students involves a field trip including the college chapel and a library. In the chapel I (Greene) deliver a brief account of Barker’s theory of behavior settings, and, in the settings I choose for this activity, I note that lecturing from a raised pulpit has architectural implications of its own. Then I ask students to sing the well-known song *Row, Row, Row Your Boat* in rounds. Some students admit to being uncomfortable singing a secular song in a church, but most seem to enjoy themselves until the next stop – the campus library. With a librarian’s permission, I insist on another chorus among the books. It usually takes more than one try to get much volume, and virtually everyone notices how out of place the behavior is. At the end of the tour, I ask students how they felt singing in each setting and whether it was more awkward in one area than the other. Another option is to take a sound meter along to see whether sound levels in each setting match students’ levels of discomfort. Settings to explore on other campuses might include concert halls, outdoor plazas, or the student center.

**Noise**

**Noise sensitivity demonstration**

Noise, unwanted sound, is one of the most chronic of environmental stressors. Its effects on humans include both physiological and psychological distress (e.g., Barber, Crooks, & Fristrup, 2009; Glass & Singer, 1972). Although the categorization of one sound or another as noise depends on several factors unique to the situation as well as sound itself, individual characteristics such as noise sensitivity shape not only how people react to a sound but also how people set up their environments in the first place. This activity demonstrates the person-environment interaction as it applies to ambient sounds, noise sensitivity, and the home environment.

Students complete a brief checklist of noise sources found in their bedrooms along with a short version of Weinstein’s (1978) Noise Sensitivity Scale. They then run correlations or t-tests between high vs. low noise sensitivity groups. I (Benfield) also ask a few of the students who scored on the extreme ends of the noise sensitivity scale to discuss their responses from the noise survey for quick comparisons in class. Those with higher noise sensitivity almost always have fewer noise sources in their bedrooms. This outcome demonstrates that those who are more sensitive to noise choose or adopt environments that are quieter. A link to a shortened version of the scale is www.colostate.edu/Depts/Psychology/environmentalpsych/supplements.

**Sound Logging/Isobel Mapping Using a Decibel Meter**

Sound logging is a simple exercise to orient students to the auditory world and the psychology of sound and noise perception. I (Mace) take the class outside and find a bustling campus area. I have the students find a spot away from others and listen to the sounds around them. Students should write down the sound sources and the times the sounds started and ceased. After 10 minutes of sound logging in the busy area of campus, they complete the same task in a less-used, quieter area. I then have students break into small groups and compare their sound logs.

Because I have access to decibel meters, I have groups of students complete isobel mapping (i.e., a two-dimensional sketch of sound levels across a landscape) to show how sound propagates. Students begin at a central location close to a loud noise source, such as a main street on or near campus. They take decibel measurements at this location and then move about 100 yards in one direction. They stop and take decibel measurements. They walk another 100 yards in the same direction and again take decibel measurements. They continue completing the decibel measurements at least 5 times in each direction away from the central location. Once all groups have completed their measures, I have students complete an isobel map by sketching the location on paper and drawing lines around the...
central location representing the various decibel levels (think of a topographic map that depicts elevation). The end result is a visual representation of the loudness of a given location, which can lead to a discussion about consequences of noise levels in different locations. An example of an isobel map of Stanley Park in Vancouver, B.C. is located at http://www.sfu.ca/sonic-studio/handbook/Isobel.html

Noise, Natural Sounds, and National Parks

The National Park Service has a Natural Sounds Program that conducts research on sounds in parks, including natural sounds and noise created by humans (aircraft overflights, road vehicles, snowmobiles, human voices). The website is www.nature.nps.gov/naturalsounds/. After students explore the website, I (Mace) have them use a sound level meter to compare sounds across campus. Are the more natural areas quieter? Are there areas where noise is encouraged? Are there areas where students go to get away from noise yet where it is common for them to listen to MP3 players or similar devices? Can they think of implications when park visitors experience sounds in different places?

Weather and Climate

Tracking Weather Forecasts

This exercise involves tracking weather forecasts (5 to 7 days ahead) for a two-week period and comparing the accuracy of forecasts to the actual conditions on dimensions such as temperature and precipitation. I (Mace) create a worksheet so there are three columns for each of the next five days. Columns are used to record the forecasted high and low temperatures as well as the chance of precipitation. Students should track the weather forecast for two locations, one local town and another more distant location. Some useful internet sites for weather forecasts include www.wunderground.com and www.weather.com. Each day students record the forecast to track changes in it over a five-day period. Students should record the actual highs, lows, and precipitation once the given day has passed. Students compare the actual results with the series of forecasts. A clear pattern typically emerges showing a high degree of forecasting accuracy for up to 48 hours but less accuracy for longer-range predictions. Students can access historical data at the www.wunderground.com website to allow comparisons with daily weather events by location from the past. For a longer assignment, students can check the long-term forecast on the Farmer’s Almanac website, www.farmersalmanac.com, and compare that site’s more folk approach with the more scientific forecasts provided by the National Weather Service. The exercise can be useful in a discussion of why people ignore warnings of a disaster.

Disasters and Toxic Hazards

Toxic Exposure – Meth Labs

Environmental psychologists concern themselves with the health effects of natural and built settings. Areas of increasing concern include “meth houses,” built structures, often homes or hotel rooms, that have become toxic due to the cooking of methamphetamine. Meth poison is invisible to the naked eye and can cause short-term symptoms such as headaches and sore throats, long-term serious health consequences, and even death. The cost to clean or demolish a home that has toxic meth exposure is in the tens of thousands of dollars, and only highly trained individuals can clean or demolish these sites. One website about these concerns is http://www.kci.org/index.html. I (Romano) download and show one of their videos in class, after previewing it carefully for inappropriate content. I then ask each student to find a news report of a meth lab cleanup, in particular the time and cost of the cleanup, the number of people affected by the toxic exposure, and the reported consequences of the exposure. I lead discussion of what steps, if any, students would take when searching for a home to rent to reduce their risk of renting a place that had hazardous meth or other toxicity. In particular, we discuss whether students are willing to pay a higher rent for assurance that the landlord had checked the facility for toxins.

Natural and Human-Made Disasters

I (Romano) select a natural or human-made disaster that has received wide coverage in the press (e.g., Hurricane Katrina). I have students find, read, and bring to class at least two online news articles about that disaster. I ask students to analyze the article by identifying how it might fit the disaster concepts used by environmental psychologists, such as: (1) magnitude, or the size of the geographic or population affected (e.g., a few homes as typical in a tornado or many communities as typical in a hurricane); (2) event duration, or how long the disaster is physically present and how long it affects people (minutes, hours, days, months, years); (3) low point, or the point at which things are as bad as they are going to get and will now improve over time; (4) warnings, e.g., long-term warnings, short-term warnings, no warnings; (5) crisis effects, e.g., people anticipating the possibility of a disaster versus they were complacent, thinking it would not happen; (6) levee effect, e.g., people settling close to the disaster area thinking they had protection through some sort
of preventive intervention; (7) adaptation, or
evidence that people learned to live with the risk of a
particular type of disaster because the risk is rather
commonplace in the area (see Bell et al., 2001 for
details on these concepts). I ask students to share
their verbal summary of the article and related
concepts in class, and I let the other students offer
alternative perspectives on how the disaster fits the
concepts.

**Group Assignment on Disasters**

I (Mace) have students work in small groups (3-
4) and research a major historical natural or human-
caused disaster. Groups can divide the task of
researching the effects of their specific disaster into
individual, community, and societal levels. I include
both natural and human-caused disasters, as this
distinction serves as the main comparison in class
discussion. I focus the discussion and comparison on
several relevant variables such as the low point, acute
stress, and the long-term psychological effects of
natural and human–caused disasters. A positive spin
to take following this discussion is to have the class
brainstorm ways to prevent or prepare for future
disasters. Instructors can include information from
the U.S. federal government Community Emergency
Response Teams (CERT) program (see
[www.citizencorps.gov/cert/](http://www.citizencorps.gov/cert/)).

**Tracking a Specific Storm as It Moves**

I (Mace) have students use the Weather
Underground website ([www.wunderground.com](http://www.wunderground.com))
during hurricane season to track individual storms
and stimulate class discussion about many of the
dynamics of hurricanes, disasters, preparedness,
climate change, and the aftereffects on the
community once a hurricane has passed. The
Weather Underground provides a wealth of
information and data on current and historical storms
that generally get students interested in tracking
hurricanes, the effects of disasters, and forecasting
the weather. It is easy to demonstrate fallibility in
forecasts, as not all areas predicted to be hit are hit,
and some areas get more severe impacts than
forecast. The crisis effect, in which people do not
take action, also appears in the reported effects (see
Bell et al., 2001 for details on these effects).

**Personal Space**

**How Close Do They Get?**

Personal space is the body buffer zone that
people maintain between themselves and others (e.g.,
Sommer, 1969). To illustrate this concept, we have
students form two lines 4 or 5 feet apart, each facing
the other. Each student should directly face another
student. Students are to walk toward one another and
stop walking whenever they feel uncomfortable.
Once all of the students have ceased walking
forward, we have them observe the distance between
themselves and their partner, estimating the distance
by counting floor tiles or using tape measures. We
ask them to describe any physiological personal
space zones and consequences of invasion of
personal space.

**Personal Space on Campus**

After completing the previous activity I (Mace)
prepare students wander around campus looking for
estimates of personal space distance variations in
public settings. The student center and library
provide lots of opportunities for study. An added
variation of this assignment is to have students subtly
invade another’s personal space and to pay attention
to the reactions of the other person, especially the
nonverbal cues displayed showing discomfort. I
address ethical and safety concerns and indicate that
invasions should be something that would normally
occur, such as when standing in line at a food counter
or sitting next to someone on a bus. Additionally,
while students are walking around campus, I have
them also record examples of territorial markers they
encounter (e.g., a backpack or book or coat placed to
keep others a little farther away) and what these
markers are attempting to communicate. In my
experience, students are fascinated by personal space
and this exercise can lead to great class discussions.

**Classroom Seating and Participation**

Instructors know that students have different
preferences for where they sit in class, and seating
position can make a difference in discussion
participation and grades as well as in getting the
attention of the instructor (e.g., Stires, 1980). In one
exercise I (Mace) provide each student with several
copies of a typical classroom seating arrangement,
representing the front of the classroom, the back, the
sides, and the middle. I have students take one of
these sheets to each of their classes for a week and
record the seating locations of those who contribute
in class either with questions, answers, or discussion.
I also have students do a head count so we can take
size of class into consideration. We analyze the
results in class to see if a pattern emerges where
those in the front and middle of each class contribute
more.

**Privacy Preference Demonstration**

Environmental psychologists theorize that
privacy is a central component of several
environment-based social behaviors including
personal space, territoriality, and crowding (e.g.,
Altman, 1975). To help demonstrate to students the impact their own privacy preference can have on their everyday behaviors, this in-class activity exposes students to both a personality scale measuring privacy preference and previous research involving classroom seat selection (e.g., Marshall, 1974; Pedersen, 1994).

Students complete two privacy subscales, score their answers, and, in class discussion, identify themselves as high, middle, or low scorers. In my (Benfield) experience, the higher scoring individuals are on the back row or the end seats of the other rows. The scales are on the chapter website at www.colostate.edu/Depts/Psychology/environmentalpsych/supplements.

**Territoriality**

**Territorial Personalization and Owner Personality Using Trace Measures**

Territorial behaviors include controlling access to the space, aggressively defending the space from invasion, and personalization of the space by the owner (e.g., Altman, 1975). Although the first two are harder to observe or demonstrate in the classroom, students can easily observe personalization of space in a residence hall or office. This demonstration combines the trace measure methodology of indirect observation, the self-expressive nature of territorial personalization, and the personality research of Gosling (2002, 2008) to show students how environmental cues can provide information to the outside observer. Similarly, this activity serves as another demonstration of how personality type can influence person-environment interaction. In essence, personalization of one’s territory correlates with the owner’s personality, and others judge our personality by the way we personalize our territory.

This activity works in several variations depending on the preparation of the instructor or the resources available. Students need to view a primary territory (e.g., bedroom, automobile, etc.) and make judgments about the owner’s personality by completing the Gosling personality scales as the students think the owner would. The owner also completes the scales. In class, the instructor compares those personality judgments (i.e., the class member’s judgments versus the owner’s self-report). Students typically report surprise at how well they can attribute Big 5 personality traits to an individual based on simply observing his or her territory. Several variations on this activity exist. Instructors could ask 3-5 student volunteers to provide pictures of their bedrooms, and the class could try to match each room with each student. With appropriate consent, students could take a field trip to the residence halls to do direct observations of student volunteers in their rooms. With appropriate consent, the instructor could bring pictures of faculty offices for the in-class observations and discussion. Any of these approaches will demonstrate that how people personalize their living spaces reveals something about their personality.

**Residential Environments**

**Place Attachment Writing Exercise**

A great introduction to place attachment is to have students write two or three paragraphs describing one or more of their special places. These places can be built or natural settings, and students should describe the place itself along with the specific reasons why the place is special to the student. I (Mace) have students do this as a homework assignment so they can spend some time reflecting on the places they have known and why the places are important to them. The next class period I share a couple of my special places, and then ask the class to share their places. As part of the discussion, I ask students how they would feel if something detrimental were to happen to their places; students report that the more attachment they feel the greater the sense of loss they would anticipate.

**Place Attachment and College Student Retention**

Students’ high place attachment to their hometowns can lead to homesickness and students spending less time on campus. McAndrew (1998) provides a scale that measures attachment and homesickness. I (Mace) use a shortened version in a Likert-type format to illustrate the relationship in class to show how important a sense of place is to college student retention. I have the students sum their individual scores on the two items and compare their scores with those of classmates. High scores indicate strong place attachment to the home. I consistently find that the longer the students have been at the campus, the lower their scores. The shortened scales I use can be found at www.colostate.edu/Depts/Psychology/environmentalpsych/supplements.

**Work, Learning, and Leisure Settings**

**Exploring a Museum Environment.**

A museum field trip or art gallery visit on or off campus provides a great opportunity to describe numerous design principles and human-environment interaction. I (Benfield) video record students as they begin their tour, taking into account informed consent
issues. At the end of the tour, I show the video and ask why they went the direction they did. I ask what attracted them to particular exhibits and why they bypassed other exhibits, when or if they felt fatigued, and discuss whether this might be due to overload. We discuss whether they found the experience restorative rather than fatiguing. Additionally, we discuss several aspects of museum design including wayfinding aids, noise levels and lighting levels in the exhibits, options for movement or manipulation of levers or buttons, and the print size of the interpretive material. We then discuss what students believe that they have learned, if anything, and the factors associated with more effective exhibits. Awareness of these considerations helps students realize that designers consider these elements when planning a contemporary museum setting.

**Our Campus Environment.**

College campuses reveal rich histories, but in my (Greene) experience, few students have examined buildings and other campus spaces systematically. This exercise encourages students to become scholars of their campus and its legacy. It can be eye-opening to learn about the architectural history of one’s campus in terms of the layout, evolving building materials, and changes in pedagogy and campus cultures. A sample exercise is on our chapter website at www.colostate.edu/Depts/Psychology/environmentalpsych/supplements.

**Human Factors and Bad Design on Campus.**

Human factors or ergonomics involves the interaction of humans with machines and ambient environments. We often associate human factors principles with Industrial/Organizational Psychology or Cognitive Psychology, but the environmental factors that create stressful workplaces have much in common with homes and other institutions. Almost inevitably, campuses illustrate poor ergonomics. Instructors may know a few examples of doors that swing unpredictably or of unreliable machines, but I (Greene) was amazed when I first started asking students to provide photographs and descriptions of human factors errors in their residences and classrooms. Plumbing fixtures that turn the wrong way and misaligned maps are common, but students typically provide a deluge of other inconvenient and sometimes dangerous examples. The assignment is engaging, but relatively easy. Complete instructions for students are on the website (www.colostate.edu/Depts/Psychology/environmentalpsych/supplements).

**Designing a Remodeled Space to Incorporate Principles from Environmental Psychology**

I (Romano) use a fun semester-long homework assignment that involves assigning students to groups and having each group come up with a new design for an existing space that improves the functionality of the space through design principles learned in the course. Each group selects a space, which might be a restaurant, a lobby, a classroom, an outdoor seating area, or another location of interest. The groups create a poster that explains their remodel and how their remodel incorporates material from the course, such as congruence, noise abatement, or stimulation. Having a presentation day toward the end of the course when all groups present their posters is an engaging and enlightening way to review course material and demonstrate applicability of constructs. On our chapter website is a sample of the assignment handout, and a sample flyer inviting others on campus to the presentations www.colostate.edu/Depts/Psychology/environmentalpsych/supplements.

Also on the website is an alternative semester-long service project from Britt Mace, in which students apply environmental psychology principles to a community project.

**Changing Behavior to Save the Environment**

**Commons Dilemma Simulation**

The commons dilemma is a social dilemma derived from Hardin’s (1968) concept of The Tragedy of the Commons. When a slowly regenerating resource—such as the whale population, a confined grassland, or a forest—is shared by a number of people, the temptation is to harvest more than one’s share. Strategies for individual gain lead to collective loss; if too many people take more than their share the consequence is that the resource disappears faster than it can replenish and everyone loses. We use a game that simulates the commons dilemma as a fun class exercise. A thorough description of how to adapt it to the classroom is on the chapter website at www.colostate.edu/Depts/Psychology/environmentalpsych/supplements.

**Calculating Carbon Footprints**

Students can answer many personal behavior questions and calculate their carbon footprints at http://www.carbonfootprint.org. Students should complete all questions on the website out of class and bring their results to class for discussion. In addition to calculating their actual carbon footprint, it is also a great exercise for asking them to think about making lifestyle changes and the costs and benefits of doing...
so. I (Mace) have students choose two changes they would like to make to their current situation (e.g., switching to a more fuel efficient vehicle, changing their household energy consumption) and recalculate their carbon footprint to include their potential behavior changes. We discuss in class the results and how changing behaviors can reduce carbon impact on the planet. This exercise serves as a useful segue into a discussion of global warming as well as the commons dilemma.

**Summary**

We believe that environmental psychology is an exciting field that engages students in their everyday settings and encourages them to think about how the environment influences their actions and the actions of those they observe. The field also helps students understand what psychology as a discipline can do to foster sustainable practices in society. We have created these exercises and demonstrations from our own experience through years in classrooms, typically based on findings in the research literature. We modify them as technology evolves and as we receive feedback from students.

**References**


Activities for Engagement in an Industrial/Organizational Psychology Course

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Industrial/Organizational (I/O) psychology is an applied course; by incorporating activities into the course, students can more readily see how we apply psychological science to organizations. Students learn about a job in which they are interested and see practitioners apply the class concepts (e.g., performance appraisals). Furthermore, many students indicate that the applied activities we have conducted in class have helped them in jobs and graduate school by providing a practical application of their knowledge on which to build. Here I discuss a series of activities that I use in my I/O course, including activities focusing on (a) motivation, (b) analyzing the job of a psychology professor (including criterion-development, performance appraisal, predictors), and (c) constructing a final exam. Following these examples, we provide an annotated bibliography for I/O instructors hoping to encourage active participation by their students.

Motivation

We cover theories of motivation at the beginning of our I/O course. I introduce this topic first because I believe it is important for students to learn about motivation at the beginning of the semester so that they can apply those principles in order to be more productive during the semester. In the motivation unit, students apply behavioral and Valence-Instrumentality-Expectancy (VIE) theories of motivation to a problem behavior that they have. For example, many students note that they procrastinate studying or working on class projects, want to decrease smoking behaviors, or want to start preparing for tests such as the GRE. It is vital that the student pick specific and observable behaviors for this activity to be successful.

Once each student selects a problem behavior, the students use these motivation theories in order to explain their own behaviors and to develop intervention plans to improve their behavior over the course of the semester. Although it is an ongoing project throughout the semester, students typically embrace it, seeing the practical applications of changing a problem behavior. The instructor might ask the students to explain their problem behaviors and the intervention procedures that the students have adopted to make sure that the student understands the motivational theory and has a specific, observable problem behavior.

Once and intervention plan is in place, the students track their behaviors before the intervention and then track their behaviors while the intervention is in place. Students can present data at the end of the semester on how their behaviors have changed (or not changed) and how the theories we discussed in class can explain those changes. The instructor should not grade the projects based on whether or not the intervention worked, but instead on the correct understanding and application of the motivation theories.

Applying Concepts to the Job of a Psychology Professor

For a portion of class activities, we attempt to create some continuity by having students use “psychology professor” as a job they investigate throughout the semester. Using this job throughout the semester with diverse activities serves several purposes. First, the students are familiar with the job of “professor.” Second, they have access to people who perform this job. Third, we believe it gives students perspectives about psychology professors that they did not have before because students only see the teaching portion of a faculty member’s job. We divided applied activities into units throughout the semester. Below, we provide a brief description of some of these activities.

First, students learn about conducting a job analysis, which is paramount to any other I/O intervention. One cannot select an employee before he or she knows details about the job for which he or she is hiring. Our students collect information about the job of a psychology professor by collecting visiting O*Net (http://online.onetcenter.org/, a Website and search engine where visitors can learn the detailed descriptions of different jobs), obtaining
curriculum vitae from two faculty members, and interviewing a faculty member. Students use the concepts from class to construct a job analysis based on this information, and the job analysis then serves as the basis for other activities.

After completing a job analysis, students select several criteria they believe are important to performing the tasks of a psychology professor. These criteria could include teaching skills, written communication skills, and knowledge of psychology, among many others. Using these criteria, the job analysis, and information from class, students then construct an evaluation system for faculty members. Students construct two evaluation forms — one is a student evaluation form that focuses only on the teaching component and a second is an evaluation system for the entire job of a faculty member. Students learn to apply concepts about defining and measuring criteria to this assignment, and it illustrates how difficult it is to construct a valid evaluation system.

After discussing prediction and selection in class, students then use the information that they composed to devise a system to select a fictitious new professor for our department. We typically share a generic faculty-hiring process so that students can understand how we currently make these decisions. Students design their selection systems and defend their choices based on class content. In this activity, students also describe how they would use different statistical decision-making processes in order to make their selection decision from a pool of candidates.

Therefore, throughout the semester, students are applying concepts from the textbook to a job with which they are familiar and for which a selection decision would affect their own major. Students report that these activities are much more difficult than they originally thought, but that these activities are also valuable.

**Cumulative Final**

For the I/O course, we assign a cumulative final with a spin: students construct a final and then provide the answers for that final. We introduce students to Bloom’s taxonomy (Anderson & Krathwohl, 2001) and the ways we can use the taxonomy to construct questions for an exam. The assignment is for students to develop questions covering each reading, while also covering the different levels of the taxonomy across the test. We typically have given the assignment just focusing on knowledge, comprehension, and analysis questions. This is a very complex assignment and by limiting the “level” of questions to three, it is much more manageable for the instructor to grade. We give students parameters for the number of multiple-choice, short-answer, fill-in-the-blank, and essay questions they can use. Students then provide a key to the final. We have assigned this final as an individual assignment; however, it could be a group assignment as well.

This is a very difficult assignment for students. They have to understand how to sample material for an exam, how to write test questions, and how to address different levels of knowledge. These skills are essential to the training in I/O psychology.

**Conclusion**

In our experience, engaging activities help increase student learning outcomes, especially in applied courses. Therefore, we have taken the approach of incorporating an activity theme throughout our I/O course. However, instructors can easily use components of these activities to illustrate different concepts in the class. Below are other applications suitable for engaging students in an I/O course that have some support in the literature. We have included two types of applications – activities for general course structure and content specific course activities.

**Reference**


**Activities for General Course Structure**

**Supplemental Materials**

The Society for Industrial and Organizational Psychology [SIOP], Division 14 of the American Psychological Association, has produced modules for teaching I/O psychology in an introductory course as well as activities for different concepts covered in an I/O course. The information includes PowerPoint slides and supplemental materials, including activities, for topics such as workplace diversity, judgment and decision making, and training in organizations. The Education and Training Committee of SIOP constructed the materials.

Evaluation of Materials

This article describes using the SIOP learning modules to help communicate I/O topics to students. Four instructors presented four modules in lecture format during 10 class sessions in an Introductory Psychology course. Instructors selected which module they would present in class. Students completed questionnaires measuring student knowledge, reactions, and intentions before the class period where the instructor presented the module and the same questionnaires two days after the lecture at the beginning of the next class. Results showed that student knowledge increased and more students were interested in I/O courses.


Team-based Learning

This article describes a team-based learning approach that helps students develop communication and social skills in a classroom environment. The technique used in this article consists of a preparation phase, an application phase, and an assessment phase. Once students completed a readiness assessment for each topic in the textbook, the application phase began where the student completed problems for which they had to apply what they had learned. During the assessment phase, students worked on the larger group project where they turned in a company portfolio describing how they dealt with each topic in the textbook. Students reported the technique to be useful for learning the material.


Business Simulation

This article describes using business simulation software to make real life business decisions in an I/O course. The simulation required students to serve on boards of a soda company. Student teams decided where they wanted to spend advertising money. At the end of the simulation, the computer calculated net worth and the team with the highest net worth won the competition. Students completed an assessment of management knowledge before and after the assessment. Students answered more questions correctly at the conclusion of the simulation. Students reported further understanding of management and executive interactions in the business setting.


Virtual Course

The article describes three different iterations of a virtual I/O psychology course. The online, discussion-based course uses lectures, discussion, and other activities. In the article, the author describes how the course has developed, the evaluation of the course, the benefits of such a course, and the challenges. The author focuses on the benefit of experiential learning in this virtual course and highlights that students learn about the “organization of the future” (p. 205) while at the same time learning I/O psychology concepts.


Colloquium

The authors describe a colloquium as an end-of-course project for students who have participated in an I/O internship. The students wrote integrative papers reflecting on their internship experiences, and faculty members approved each paper. Students then participated in a colloquium where they gave a 45 minute presentation and fielded questions for another 15 minutes. In the presentations, the students described how they obtained their internships, the work they performed, how their education prepared them, how the internship experience supplemented the coursework, and a self-critique. Students completed a survey at the end of the course, and rated the experience. The students indicated that the colloquium helped them integrate their coursework and applied experiences.


Student Portfolio

This article describes a portfolio activity devised to increase student’s awareness of their career goals. The portfolio exercise included 6 parts. Students assessed their own personalities, skills, and work experiences; selected jobs they found interesting; compiled resumes and cover letters as if they were applying to their jobs of interest; and interviewed job incumbents in their professions of interest. After the project was complete, students revised their goals and
interests in a reflective statement. Over half the class found the entire project useful, and most students reported that the occupational interview was the most helpful.


**Incorporating Applied Projects**

This article describes how to incorporate applied projects for I/O psychology students into coursework. The authors include discussions of suitable projects for master’s-level students, the benefits of service learning in general and consulting projects in particular, how instructors can help meet the requests of the client while teaching I/O content, and the issues of serving as both a supervisor of a placement and as an instructor.


**Fantasy Organizations**

This article describes a classroom technique that can incorporate multiple I/O topics. The instructor allowed students to form small groups and chose a fantasy organization that they would use throughout the course of the semester. Students had a great deal of flexibility in choosing the type of organization they wanted to use. After each lecture, the groups reviewed a list of questions that involved how they could apply the day’s topic in their fantasy organization. Students had positive reports about the exercise and expressed that the exercise facilitated their understanding and interest in the concepts that were covered.


**Content-Specific Course Activities**

**Personality**

This article describes a group exercise for instructors to use in courses, such as I/O psychology, that discuss the importance of personality tests. The author first discussed the problems with giving personality tests to students, including a) the myth that personality tests are common sense, b) the cognitive biases that often lead people to accept vague or incorrect personality information as accurate, and c) the problems with common personality testing instruments. The activity addressed these issues, provided students with information about their own personalities, allowed students to compare their results to those of their peers, and provided a guide for discussing the relationships between personality and organizational issues. The author also provided recommendations for how to debrief the students following the activity.


**Interviews**

The authors describe a technique to help students learn the differences among interview methods in employee selection. Students volunteered to act the parts of the interviewer and job candidate. The instructor provided students with examples of questions typical of either structured or unstructured interviews. The interviewer asked the job candidate questions from either the set of structured or unstructured questions. The rest of the class observed the interview and rated the quality of the questions. The demonstration showed students the variability in unstructured interview questions compared to structured questions. Students reported favorable changes in reaction and learning (as measured using a pretest-posttest evaluation).


**Business Ethics**

This article describes an activity used to teach about ethical behavior in the business environment. For the activity, the author used a series of employee behaviors that people might consider unethical, including taking office supplies home, using an office copy machine to make personal copies, and charging inappropriate items on the company credit card. During the activity, students read instructions that indicated they should take the perspective of either a company president or an employee and rate the acceptability of the behaviors. In groups in which students received the same instructions, students calculated the mean scores for each of the ethical scenarios. The groups then compared the mean ethical score for each scenario. The differences between how ethically the two groups viewed the behavior highlighted how different perspectives affect the evaluation of an ethical dilemma. Students reported that the activity was highly interesting and a good use of class time and that future classes should incorporate the activity.
Performance Appraisals

This article describes a project where the instructor undergoes a job appraisal conducted by the students. Groups of students selected scales that they thought would be useful for evaluating a faculty position. Then students individually appraise the job of the class instructor, and the groups average their scores. The groups wrote a summary of their findings and provided specific recommendations to help the instructor improve his or her performance. Students reported that the project is a useful teaching exercise.


Tomlinson (2009) describes an ethics module to use at the beginning of undergraduate organizational courses in either business or psychology. The author developed the activity in order to address several limitations with the current training in business ethics. For example, the teaching of ethics often implies that only immoral people engage in unethical behavior, the data do not support this claim. The author addresses ethics from an interactionist perspective (i.e., both individual and situational characteristics influence ethical behavior) and serves to address two primary issues: a) how future managers can deter their employees from engaging in unethical behavior and b) how future managers can guard against engaging in unethical behavior themselves. The author describes the interactionist perspective of the activity, the teaching format with different case scenarios, and ways to evaluate student learning during this activity.


Job Analysis

The author describes a job analysis exercise in which students were required to choose an actual employed person and to use any method that they have learned about to obtain any necessary information about the person’s job. In addition, students selected criteria on which people in that specific position should be evaluated, proposed ways to select people for that position, devised a training program for new employees, and decided how they should recruit people into that position. Students reported that this exercise was a positive experience, and self-report evidence suggested that the goals of the project were met. Additionally, students reported that this project was quite challenging.


Sexual Harassment

This article describes an activity to identify cases of sexual harassment. The authors explained why sexual harassment is often difficult to define and identify. For the activity, the instructor gave the students six ambiguous scenarios and asked students to determine if sexual harassment was present. During the activity, students also referred to different policy statements regarding sexual harassment (e.g., EEOC’s Guidelines on Discrimination Because of Sex). Students then engaged in small group discussions about each of the scenarios before participating in a full classroom discussion. The instructor directed discussion so that students identified why they made each determination and how they reached to those decisions. The authors’ evaluation of the class activity showed favorable student perceptions and learning evaluations.

Group Performance

The authors describe an activity to use during discussions of group behavior and evaluation. After forming groups of approximately 5 students, the instructor randomly assigned each student to the role of either leader or member) and asked the students to develop a key for a short multiple-choice quiz that they recently completed. The article describes the leader and member selection, the instructions to the group members, group feedback, and debriefing of the activity. After the activity was complete, students rated the activity as effective and relevant to the course goals.


Job Satisfaction

The author describes an active learning project in which students contacted organizations and collected data about job satisfaction. Students read a chapter in a textbook describing job satisfaction, morale, and factors that affect job satisfaction or dissatisfaction. They then created an operational definition of job satisfaction and constructed a 5-6 item job satisfaction survey. Students then entered
organizations in the community and administered their surveys. They then compiled a summary of the data and presented it to the organization and class. In addition to the hands on learning of the course, students reported that this project gave the students skills that helped them gain future employment.


**Motivation**

This article suggested a new method in teaching the VIE theory of motivation to students. Students completed a questionnaire that measured their motivation in the course. The questionnaire asked the students to make judgments on how attractive they found different course grades (first-level outcomes) as well as on 8 second-level outcomes (e.g. strong letter of recommendation, limited social life, fatigue). Next, students indicated their perceived relationship between the second-level outcomes and the first-level outcome. Third, students recorded formulas on a worksheet provided by the instructor and indicated what amount of effort would likely lead to different degrees of the first-level outcomes. Students reported positive evaluations of this method and reported that they understood the concepts of the theory better than the previously used lecture method.


**Aging**

This chapter described why I/O psychology courses should incorporate research on aging as well as ways for instructors to accomplish this task. Unlike in previous generations, one’s career in adulthood is no longer viewed as stable and uniform; careers through adulthood are dynamic and composed of more alternatives and changes than in generations past. Therefore, I/O psychology courses should address particular issues related to aging in the organization. For example, I/O psychology instructors can address issues such as social policy and law, downsizing and layoffs, job training, and retirement options in light of different ages in the workplace. The authors included a literature review of relevant topics, and described how an instructor can incorporate this literature into the course. In addition, the chapter included course activities and Web exercises to illustrate some of these issues.


**Conclusion**

Because I/O psychology is an applied course, it is important to have engaging activities that give the students experience on how to apply information to an organization. We have provided instructors with some of our own methods that have been successful for teaching I/O psychology as well as some reported in the literature. If teachers find any of the provided activities appealing, we highly encourage them to read the full article and/or contact the authors, as the authors usually have further recommendations on how to make the activity successful. Also, we encourage members of the instructional community to continue to collect data on novel activities and to share their findings in relevant journals. Providing students with excellent education in I/O psychology helps further the application of psychology in organizations.
Engaging Students in Cross-Cultural Psychology

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Cross-cultural psychology is the scientific study of how cultural factors influence human behavior and mental processes. While America has lead the world in conducting research on human behavior, the most common research participant has been the American college student (Arnett, 2008). Cross-cultural psychology is valuable in that it allows us to expand our knowledge base to include diverse samples and to test our findings in more diverse settings. In the past three decades, many psychological topics have been re-examined in an attempt to discover the universality of previous findings (Sinha, 2002). The growing popularity of cross-cultural psychology reflects a process of globalization in the social sciences that seeks to overcome Western biases and remove ethnocentric perspectives (Sue, 1999).

Introducing the many and varied concepts covered in a typical introductory class can be a challenge; instructors of cross-cultural psychology face additional challenges of explaining variations in thoughts, feelings and actions across cultures. The purpose of this chapter is to assist instructors in meeting this goal. We first describe an original exercise using a social networking site as a mode for exploring cultural similarities and differences in human behavior. In addition, we provide college instructors with an annotated bibliography of engaging exercises and demonstrations that illustrate the range of topics addressed in a typical cross-cultural psychology course.

Using a Social Networking Site To Explore Cultural Variation: An Original Activity

One way to promote student engagement is to facilitate student-centered learning. According to Goodyear and Ellis (2008), an important component of student-centered learning is a willingness to adopt educational innovations. With the rapid rate of technological innovation and change, many students are more comfortable in online environments than in traditional face-to-face classes (Kissshore, Tabrizi, Nassehzhadeh, Ozan, Aziz, & Wuensch, 2009). Instructors can use the technology with which students are so comfortable and familiar to engage students in the learning process.

There are more than 200 social networking sites, and their success is largely a result of two human needs: the need to connect with others and the need to create a sense of identity. Social networking websites provide instructors with opportunities for increasing student interest and involvement with course materials (Conole & Culver, 2009). When students first join a social networking site such as MySpace or Facebook, they create a profile where they can post pictures and provide information about themselves and their interests.

The design of this assignment facilitates students’ awareness of cultural similarities and differences. In the assignment, students create a profile page for an imaginary person (i.e., an avatar) from a culture different from their own. Students craft a profile page to reflect the avatar’s personality, preferences and environment in which he or she lives. The students first provide a profile of the avatar and over the course of the semester write a blog (i.e., an online journal) about the avatar in terms of several psychological processes, including child development, personality, gender differences and social behavior. In each blog entry, students must cite sources from the scientific literature as well as internet resources to support their descriptions. For example, in the child development blog, students typically address the parenting practices, temperament, attachment, cognitive development and social development in their avatar’s culture.

Social networking sites offer a great deal of flexibility in terms of the content students choose to include as well as how they present the information in the structure of their profile. In this multimedia environment, students can integrate popular music, videos and multi-media representations into their avatar’s profile to help articulate a cultural identity. Students often go beyond the assignment to include emblems, music videos, images and pictures that reflect the life of their avatar. All of the students who have participated in this exercise have uploaded photos of their avatar and their avatar’s society. The photos function as another tool of self-presentation as
students think about what photos to use to articulate their avatar visually.

Student survey responses indicated that students perceived the social networking project to be a positive learning experience. Also, in the initial implementation of this project, students who participated scored higher on a comprehensive final exam than did those who prepared a literature review paper with similar learning goals covering the same topics.

By creating profile pages for characters from another culture, students can think about how identities are constructed (online or otherwise) and what kinds of interests their character might have that are not explicitly mentioned in the text. This assignment encourages students to step outside their cultural boundaries to construct a coherent identity within the online environment. In addition, it promotes engagement with all of the various facets of culture that a typical cross-cultural psychology course would cover in a manner that excites and interests students.

An Annotated Bibliography of Published Activities

The Concept of Culture

One of the first tasks facing the teacher of cross-cultural psychology is to help students understand the concept of culture. Berry, Poortinga, Segall and Dasen (1992) suggested six broad categories to explain culture, including descriptive uses, historical definitions, normative expectations, psychological differences, structural elements and cultural origins. To illustrate the concept of culture, we suggest three exercises. The first assists students in becoming aware of cultural influences on their lives, the second focuses on cultural values as reflected in everyday life, and the third encourages students to develop a more global perspective.

Discovering students' cultures: The culture collage. Students create a collage that visually depicts various facets—including values and beliefs, traditions, and so on—that contribute to their own cultural identity (broadly defined to include race, religion, gender, etc.). Collages are accompanied by brief explanatory essays. The goal of this activity is to make students more aware of the wide variety of cultural influences on their personal lives.


Shopping for cultural values. Students visit a local supermarket and make observations of the store layout, items available for purchase and shoppers. They then individually respond to a series of questions designed to highlight the cultural values expressed in the observed products and behaviors. Research on cross-cultural values supports the existence of 10 value types across cultures with significant variation as to the importance of specific values (Schwartz & Boehnke, 2004). The goal of this activity is to make students more aware of the values of the dominant culture (e.g., hedonism, security) that permeate everyday life.


Exploring the world village. Students imagine a village of 1,000 people that represents planet Earth and attempt to determine how many villagers fall into various categories (gender, language, religion, origin, age, daily life, wealth and education), assuming ratios in the village reflect those of the world. The goal of this activity is to encourage students to adopt a more global perspective.


Culture and Research Methods

Although cross-cultural research uses many of the same methods employed by other areas of psychological research, cross-cultural researchers encounter several unique problems. One of the most important methodological concerns is the difficulty of seeking equivalence in the meaning of words, measurement, sampling, procedures and theory. To illustrate this problem, we describe an exercise in which students translate and back-translate common English phrases. We also provide an exercise on conducting a field experiment on helping behavior.

Demonstrating experimentation. Students conduct a field experiment to determine whether people help members of their own broadly defined cultural groups (e.g., race) more than someone from a different cultural group and whether women or men are more likely to help. The procedure requires a confederate who needs assistance to replace a flat tire. After the students have collected the data, the instructor asks the class to identify the independent and dependent variables, operational definitions, procedure and the statistical techniques that can be used to analyze the data. The goal of this activity is to
expose students to research methods using a culturally relevant research question.


**Establishing linguistic equivalence.** Students generate several common English language phrases and slang terms and enter the phrases and terms into an internet translation service. Students then copy the translation into a second translation program to back-translate the phrase or term into English. This exercise generates lots of class discussion using practical examples of translation difficulties that illustrate how difficult it is to achieve linguistic equivalence. The goal of this activity is to highlight the difficulties of establishing linguistic equivalence.


**Culture and Basic Psychological Processes**

Culture and the human brain have co-evolved (Keith, 2011). Cultural experience has influenced the development of the human brain and, in turn, the brain’s organization has influenced culture. Thus, cultural diversity has produced differences in how human beings perceive and think about their world. Perception, cognition, intelligence and states of consciousness are all affected by cultural variation (Triandis & Brislin, 1984). To illustrate some of these cultural differences we describe an exercise in which students compare their sense of time with physical measurements of time and another exercise that examines how we might test cognitive abilities across cultures.

**Clock time and event time.** Students determine whether their culture is characterized by “clock time” or “event time” (i.e., time needed to complete an activity) and then spend a day living according to the opposite time orientation. They then write about their experiences, speculating about corresponding cultural values. According to Levine (1997) cultural differences in the pace of life constitute one of the most profound adjustments sojourners must make and can be observed when individuals move between urban and rural settings, corporate cultures and ethnic groups. The goal of this activity is to increase students’ awareness of cultural differences in time perception.


**Testing cognitive abilities across cultures.** Students imagine that they are developing a test of cognitive ability in a culture untouched by formal testing procedures. Students individually consider a series of questions in this pursuit, including how to determine what abilities are valued in the culture, how they would measure those abilities, and the appropriateness of standardized testing to measure those abilities. The goal of this activity is to encourage students to adopt a cultural approach to the study of cognitive abilities.


**Culture and Human Development**

Human development, including child-rearing practices, can differ significantly from culture to culture. Some of the differences shaped by culture include attachment, temperament, nurturance, self-reliance and autonomy (Berry, Poortinga, & Pandey, 1997). We describe three exercises that address cultural differences in human development. The first exercise helps students see the linkage between cultural artifacts and child rearing practices, the second explores parenting techniques and the third examines attitudes towards aging.

**Show and tell.** Students present artifacts from infancy, childhood or adolescence, relating them to developmental stages and processes and noting differences in the types of artifacts and their descriptions (e.g., their use). For example, some cultures might emphasize traditional occupations through common toys. The exercise serves as the basis for a class discussion of the use of artifacts in psychological research. The goal of this activity is to reveal varying cultural emphases on beliefs about child rearing and development.


**Parental ethnotheories.** Students express their agreement with a series of statements regarding parenting practices (e.g., It is cruel and neglectful to put a baby alone in a room to sleep.). They then discuss how these beliefs may reflect environmental and sociocultural demands. Students can compare their beliefs with those of parents from different cultural backgrounds as described by Harkness and Super (1996). The goal of this activity is to examine the cultural basis for students’ personal beliefs about childrearing.

Culture and perceptions of growing old. Students assess their own attitudes toward aging by answering a series of questions. They then compare their responses to those of people from varying cultural backgrounds on the same questions (provided in the exercise), noting factors that might contribute to differing views of aging. The goal of this activity is to consider how culture affects perceptions of age.


Language and Communication

Language is an obvious cultural difference (Kreiner, 2011). Understanding the vagaries of communication between individuals from different cultures is becoming more important in today’s shrinking world. Culture affects the acquisition, structure and use of all forms of communication including oral, written and non-verbal, and the study of cross-cultural communication can help us to understand how people perceive and think about themselves and their world. The exercises we describe allow students to explore the equivalence of idioms, gestures and social graces across cultures.

Cross-cultural verbal misunderstandings. Students write definitions for a series of terms and idioms (e.g., John was really pissed.). They then discuss the different meanings each phrase carries in the United States and Great Britain. Finally, students consider several commonly used American idioms (e.g., What’s up?) and the possible interpretations non-native speakers might make of them. The goal of this activity is to sensitize students to linguistic misunderstandings. A class discussion of “Do’s and taboos around the world” by Axtell (1993) can further develop this goal.


Nonverbal communication through gestures. Students identify various nonverbal gestures and then instructors explain different meanings attached to the same gestures across cultures. This activity includes information regarding a useful video and website illustrating different gestures. The goal of this activity is to sensitize students to miscommunication via nonverbal signals.


Social graces in different cultures. Socially acceptable behavior differs from culture to culture. Instructors can create an exercise using items provided by Axtell (1993) and Dresser (1996) to illustrate gestures and behaviors that are acceptable in one culture and unacceptable in another. Students try to match each behavior with the culture in which it is appropriate. The goal of this activity is to make students aware of cross-cultural variation in social graces and the gestures that are rude in one culture and perfectly acceptable in another.


Culture and Gender

The lives of men and women can differ dramatically across cultures. For example, Williams and Best (1990) examined different societies in terms of prevailing gender stereotypes, gender-linked self-perceptions and gender roles. They found similarities as well as differences between and within more than 30 countries. To help students understand gender differences, we suggest three exercises. The first exercise asks students questions about love and marriage, the second explores gender differences in emotional expression and the third requires students to confront gender norms that differ from their own.

Love and marriage. Students answer general open-ended questions about love and marriage (provided in the source). They then discuss findings from various individualist and collectivist cultures regarding romantic love and arranged marriage (e.g., whether marriage is acceptable if romantic love is not present or if parental approval is absent). Students can compare their answers with those provided by respondents in 11 different cultures described by Levine, Sato, Hashimoto, and Verma (1995). The goal of this activity is to explore cultural differences in beliefs about love and marriage and possible explanations for such distinctions.

Confronting gender norms cross-culturally. In this exercise, students compare contemporary American ideas about appropriate gender behavior with what individuals from another culture believe to be appropriate. Students react to examples of typical male-male and female-female behaviors in other cultures and then create lists of private, semi-private and public topics that they would discuss with their best friend, close friends or acquaintances. The goal of this activity is to sensitize students to varying gender norms across cultures.


Gender differences in emotional expression. Students read a series of statements from two Chinese novels and indicate the expressed emotion. They then compare their answers to those generally given in Chinese culture and discuss the universality of, as well as the cultural differences in, emotional expressions. The goal of this activity is to encourage students to think about the influence of culture on emotional expression.


Culture and Health

Both objective indicators of health as well as subjective conceptions of health vary across cultures. There are cultural variations in how we conceptualize what is healthy, assess and diagnose illness and determine what treatments are appropriate (Gurung, 2010). The exercise we suggest allows students to compare the health outcomes of three individuals with similar genetic backgrounds who were raised in different cultures.

Culturally embedded behaviors and health. Students read about a study comparing health data from three groups of men with similar genetic heritage (Japanese) but different cultural environments (Hiroshima and Nagasaki, Japan; Hawaii; and San Francisco, California). Cardiac health suffers most in mainland America, where diets often include processed foods and activity levels are typically lower. The students then consider the factors that might account for varying rates of cardiovascular disease between the groups (e.g., nutrition, activity levels). They can then compare their list of risk factors to those discussed by Mooteri, Petersen, Dagubati and Pai (2004). The goal of this activity is to make students aware of the powerful effects of culture and behavior on health-related outcomes.


Culture and Emotion

Research on basic emotions (Ekman, 1992) suggests that emotions are innate and evolutionarily adaptive and that their expression and recognition is universal across cultures (Matsumoto, 2001). Cross-cultural studies have helped us understand whether the source of this universality is biological or culturally constant learning. In the exercise we describe, students examine culture differences in emotional display rules.

Cultural display rules. Students keep a record of form and intensity of their emotions and how they expressed these feelings, including key information about each emotional situation, over a period of time (e.g., a week). They then individually answer a series of questions regarding their observations (specifically aimed toward assisting students in realizing display conventions). The goal of this activity is to consider the cultural beliefs and values that regulate the practice of emotion display and to help students identify the display rules that they use.


Personality, Self and Identity

Who am I? Over the course of our lives, we inhabit several worlds, including the world created by our family, the world of education, the job world and the world of our culture. Our experiences in each of these several worlds influence our understanding of who we are. The process of forming a stable sense of self is influenced by our physical appearance, interests, relationships, roles, plans and values as well as our culture. Our interactions with significant others within the culture of the several worlds we inhabit are important sources of our identity (Sullivan, 1953). The first exercise we describe provides students insight into the extent to which their sense of identity reflects an independent or interdependent self-construal. The second exercise explores how nicknames can reflect cultural values.

Assessing self-concept. Students explore the distinction between individualism and collectivism in three activities. In the first, they evaluate their own responses to the prompt “Who am I?” to determine whether the statements reflect personal characteristics or social roles. In the second, they complete a scale that measures individualism/collectivism. In the third, they free write about the words “individualism” and
“collectivism” and count their positive and negative associations to each. The goal of these activities is to assess students’ personal cultural orientation and to increase students’ awareness of how cultural orientation can affect attitudes, values, and behavior.


**Nicknaming across cultures.** Students interview three individuals apiece (preferably demographically diverse) and ask questions about nicknames. Students then individually determine the functions of these nicknames (e.g., individuating) and discuss cultural influences on nicknames and their functions. A classroom discussion can address how nicknames can reflect social class membership, regional identity and other cultural differences. The students can then compare their answers to those provided by James Skipper and his colleagues (1990). The goal of this activity is to illustrate how nicknaming can reinforce cultural values.


**Culture and Abnormal Psychology**

What is abnormal behavior, how is it expressed and what can be done to treat it? The study of cross-cultural psychology suggests that culture makes a significant contribution to the issues raised by these three questions (Marsella, 2000). For example, to what extent is our definition of abnormality universal and do therapeutic techniques developed in one culture work equally well in another culture? In the exercise we recommend, students try to sort culture-bound syndromes into DSM-IV categories.

**Psychological disorders and culture-bound syndromes.** Students sort a set of symptoms (each of which is based on a culture-bound syndrome) into DSM-IV-TR diagnostic categories. After completing the exercise, they then discuss the difficulty of classifying abnormal behavior and the special challenges culture brings to this endeavor. A classroom discussion can address the underlying cultural factors that might explain some of the specific disorders described in this exercise. The goal of this activity is to highlight the cultural specificity of the DSM-IV-TR and alert students to the existence of several culturally distinct disorders.


**Culture and Social Behavior**

Culture affects a wide variety of social behaviors, including social cognition, impression formation, love, sex and marriage, cooperation, conformity and compliance, interpersonal relations and intergroup relations. In the activities we describe, students identify individualism/collectivism via derogatory verbal statements. The goal of this activity is to identify individualism/collectivism via derogatory verbal statements.


**A culture shock interview.** Students interview someone who has recently had or is currently having a cross-cultural experience (e.g., a participant in a student exchange program), asking questions about the home and host cultures, preparation for the trip, experiences, adjustment to the host culture and psychological changes that accompanied the experience. Students can apply Berry’s (2001) model of acculturation strategies to help explain the experiences described by the person interviewed. The goal of this activity is to explore acculturative stress.


**Acculturation.** Instructors divide students into two groups and through a series of activities form distinct groups that simulate cultures. After the enculturation process, they experience acculturation by “sojourning” to the other “culture” and interacting with its members. Finally, they discuss their experiences. Formal evaluation of this activity indicated that students’ knowledge of the acculturation process improved and their opinion of
the exercise was very positive. The goal of this activity is to allow students to actively experience the acculturation process.


**Cross-cultural interactions.** Students attend a meeting/event organized by an ethnic or cultural group (e.g., religious affiliation, race, gender) that differs from their own. They observe the interactions among members of the group and write about the experience, including how they perceived these behaviors and conversations as different from their own. This may generate a class discussion on what cultural rules or norms influence the observed differences. The goal of this activity is to increase students’ awareness of diversity in interaction.


**Cross-cultural e-mail pals.** Students communicate with a peer from another culture. This activity provides a useful website to arrange intercultural email connections. Instructors can tailor the form (e.g., email, postal mail), extent (i.e., duration) and content of the intercultural contact. Students can describe in class the similarities and differences related to cultural influences that they discover between their e-mail pals and themselves. The goal of this activity is to grant students a firsthand experience with intercultural communication and an increased understanding of another culture.


**Organizational Psychology across Cultures**

Our final set of exercises explores the relationship between culture and organizational behavior. The work carried out by Hofstede (2001) has made major contributions to the psychological understanding of four dimensions of organizational behavior – power distance, uncertainty avoidance, masculinity-femininity and individualism-collectivism -- and how these factors differ across cultures. In the first exercise we describe, students assess a workplace of their choice on each of these dimensions and consider whether the values of the dominant culture are reflected in that business/occupation. In the second exercise, students use Hofstede’s power distance dimension to determine reactions to situations by individuals in hierarchical vs. egalitarian societies.

**Work-related values.** Students first provide a written description of an actual workplace of their choice (perhaps a current place of employment or a business setting that they have observed). They then answer a series of questions that assess the individualism-collectivism, power distance, uncertainty avoidance, masculinity-femininity and long- versus short-term orientation in the business/occupation they described. Finally, they consider whether the evident values are characteristic of the dominant culture. The goal of this activity is to increase students’ understanding of work-related values through application to a familiar setting.


**Behavior in hierarchical vs. egalitarian societies.** Students receive a list of situations individuals are likely to encounter in an organizational setting and write about how someone from an egalitarian society vs. a hierarchical society (i.e., Hofstede’s power distance dimension) would react to each situation, either as an individual writing exercise or in a class discussion. Students identify the type of society in which they were born based on their reactions to the situations. The goal of this activity is to encourage students to consider cultural differences in behavior in an organizational setting.


**Summary**

Cross-cultural psychology is an exciting field that allows students to examine psychological diversity and the underlying reasons for such differences. By using a comparative approach, cross-cultural psychology provides students with the tools to explore the links between cultural norms and behavior and how human activities are influenced by cultural forces. The exercises and demonstrations described in this chapter were designed to assist students in understanding human behaviors that may be specific to a particular culture and to distinguish them from behaviors that are universal, or common to human beings across cultures. Given the challenges faced in today’s world, it is important for students to understand how cultural differences and misunderstanding can mask a common humanity.
References


# Section 2. Cognitive Processes

*Emily Balcetis, Editor*

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Sensation and Perception: Activities to Promote Learning and Clarify Student Perceptions

Cindy Gibson
Washington College

This collection of activities and demonstrations represent a wide range of topics in Sensation and Perception. Activities from pedagogical literature, downloadable tutorials, instructor manual suggestions, affordable commercial products, and original activity ideas are summarized. Given the interactive and highly visual nature of the course matter, newer technology has simplified demonstrations and enhanced examples. Online sites provide a plethora of resources from popular visual illusions to interactive flash tutorials. The chapter author has tested each of the activities in this chapter in undergraduate Sensation and Perception courses and has found them to be effective teaching tools for the topics represented. Two original activities not published elsewhere precede the annotated bibliography. Suggestions for activity expansion and modification are also included for many activities1, again representing classroom-tested and successful ideas. Judgment of activity effectiveness is based on both positive student feedback and measurable learning outcomes.

Original Activity #1
Teen Buzz – Age Effects on Hearing

This activity involves high frequency ring tones used by youths, which most adults cannot hear. The website www.teenbuzz.org provides a chart of downloadable tones from 8 kHz (everyone can hear), to higher frequency tones that only younger and younger age groups can typically hear. For example, the chart indicates those below 60 should hear the 10kHz tone, those below 40 should hear the 15 kHz tone, and on up to the 21-22 kHz tones that typically only those under 20 can hear.

Original Activity #2: Altering Taste Sensations with Miracle Fruit

This activity involves miracle fruit (also known as miracle berry), which is widely and inexpensively available on the internet as either dried fruit tablets or lozenges. A near-tasteless fruit when eaten alone, miracle fruit coats the tongue, reacting with acids in foods eaten subsequently to change the perception of tart or sour substances to sweet. The protein miraculin found in the fruit changes conformation in acidic environments (e.g., when exposed to citric acids in tropical fruits), stimulating sweet receptors to the point of overpowering the signals from sour receptors. Any foods eaten 30 to 120 minutes after eating the miracle fruit will be perceived as sweet, including cheese, sourdough breads, and a variety of fruits. An inexpensive order of miracle fruit lozenges coupled with a few choice foods to sample can be used to introduce the concepts of taste receptors, used in conjunction with mapping taste receptors, or to demonstrate the relationship between sensory stimulation and perception. Students can be asked to research the physiological basis for the effect and/or suggest practical uses and applications for the fruit.

1 Throughout the chapter, items with asterisks are original suggestions or additions to the published resources discussed. Additional information for original suggestions is available upon request by contacting Dr. Cindy Gibson at cgibson2@washcoll.edu.
This is one activity that makes a strong impact on students. A good summary of the effects of miracle fruit can be found at the following reference:


Annotated Bibliography of Published Activities

Activities for Topics in Vision

Structure of the eye. Dissection of a sheep or cow eye provides a memorable activity for learning the structures of the eye. This activity can be accomplished using a few simple tools in either a laboratory or classroom environment and can be completed as a single demonstration, in groups, or by partners. No review by an animal ethics committee is necessary for prepared specimens purchased from a commercial vendor. Although several companies supply eyes for this purpose, Ward’s Natural Science (http://wardsci.com) flushes their fixed specimens to remove chemicals that would otherwise require special disposal. Bought in bulk of 10 or more, cow eyes can cost as little as $2 per eye. The key to this activity is a good dissection guide. Home Science Tools sells complete dissection kits, including a dissection guide, dissection tools, and a cow eye. The dissection guide including complete instructions, pictures, and labeling diagrams can be found for free at http://www.hometrainingtools.com/articles/eye-dissection-project.html.

Visual perception tutorials – Receptive fields and lateral inhibition. Some of the visual concepts most difficult for students to grasp include receptive fields and lateral inhibition. Tutorials on these and other visual perception topics by John Krantz (http://psych.hanover.edu/Krantz/sen_tut.html) come recommended by the instructor’s manual cited below. Students report that these tutorials provide clear explanations and examples for some of the most difficult visual perception concepts.


Visual perception library of resources. Viperlib is a library of resources including images, movies, and tutorials related to visual perception (http://viperlib.york.ac.uk/?swf=true). This is a growing database of free materials. The Viper2Go section contains interactive Flash tutorials on a variety of vision topics, including receptive fields and signal detection theory. Although downloads are free, you must register to view or download the materials and viewing the tutorials requires the Shockwave software plug-in.

Perception Goggles – Visual Adaptation. Drunk simulation goggles are sometimes used in driver’s education courses or other venues as concrete examples of the perceptual distortions that occur while drinking. Unfortunately, the goggles can be quite pricey. As a very affordable alternative, perception displacement goggles and inversion goggles are available at http://www.psychkits.com. These goggles come with instructions and a detailed list of suggested activities. Additional activities, modifications, and/or data recording can be added depending on the instructor’s goals. Students wearing the goggles initially report extreme disorientation followed by rapid adaptation to the visual distortion, providing an excellent and memorable example of perceptual adaptation.

Faceblind tests (Prosopagnosia). Students can test their facial recognition abilities using either the Famous Faces Test or the Online Cambridge Face Memory Test at http://www.faceblind.org/facetests/index.php. The Cambridge Face Memory Test is arguably the most valid prosopagnosia screening tool currently available. This free online version involves becoming familiar with several faces and then identifying them from among similar-featured faces. Final scores are compared to norms for face memory. One suggestion is to complete the Famous Faces Test as a class for practice, then have students complete the Cambridge Face Memory Test on their own. Students can then report through a journaling activity, group activity, or reflection paper on their own facial recognition abilities and/or the underlying theories for prosopagnosia. Students have found these memory tests enlightening and have later utilized the tests as part of a larger research project.

Change blindness demonstration. Excellent examples of change blindness can be found online (e.g., http://www2.psych.ubc.ca/~rensink/flicker/download/). Students try to find the one item that is changing between two flickering images. Some of the examples, such as “Airplane” are especially good examples of how even very large and important changes can easily be missed. Students report that their change detection abilities in this demonstration involve sequential scans of smaller sections of the alternating images.

Experiencing color blindness. The Vischeck Photoshop plug-in, available as a free download (http://www.vischeck.com), can convert any photo to a simulation of any of the three dichromatic color deficiencies. Good photos to use for this demonstration include pictures of food, dangerous (colorful) animals such as snakes, scenery shots, and
candid pictures of diverse people. *Students often have photos readily available in e-mail or on their cell phones that can be opened in the software and then quickly converted to demonstrate how that photo would look to someone with any of the three types of dichromatic color deficiencies. The Vischeck website also has a plug-in download that can help correct images so they can more easily be seen by people who have a color deficiency.

Visual illusions on the Web. There are numerous online databases of visual illusions. One of the most comprehensive sites in terms of illusions themselves (88 visual illusions in all) and detailed explanations for the illusion effect, including lists of references, can be found at Michael Bach’s website (www.michaelbach.de/ot/). This is an award-winning, go-to resource that will be handy throughout the semester, demonstrating optical illusions, color illusions, Gestalt effects, light and motion illusions, and many others. Sites with briefer explanations (http://www.sensationscientificpsychic.com/graphics or http://www.coolopticalillusions.com) and popular sites with large illusion collections but no explanations (www.scientificpsychic.com/graphics or www.coolopticalillusions.com) are also available. An index of visual illusions and demonstrations is available at http://psychlab1.hanover.edu/Classes/Sensation/ and Applet demonstrations of vision, including color, depth, motion, and more are available at http://lite.bu.edu/ (these require the latest version of Flash Player plug-in).

Visual cues and balance demonstration. This activity demonstrates how essential visual cues are to balance, which is intricately related to both optic flow and top-down processing. Students test their balance by standing on one foot while holding the raised foot first in front and then behind themselves with their eyes open and again with their eyes closed. *An additional condition can be added by having students repeat the procedure while a strobe light flashes in a darkened room. Students can time themselves and record the differences in balance time. Most students are surprised at how different their balance is when their eyes are closed (i.e., there are no visual cues). Exceptions often include dancers or other precision athletes due to practice at controlling their balance.


*It may be useful to stress the clinical applications behind understanding the concepts of visual cues and balance. Literature searches, application papers, or other assignments can be used to enhance the activity. A good application of these concepts is illustrated in the reference cited below, which is from an open access journal so everyone can easily access the original article.


Biomotion – Light walker demonstration. Representing a person walking by using only 15 points of light, this online demonstration can be adjusted for motion associated with different genders, emotions, and walking styles. Students can easily detect the differences they select so this makes a good interactive in-class demonstration of motion capture, specifically biomotion detection, based on minimal cues. The light walker can be found at http://www.biomotionlab.ca by selecting BML Walker.

CogLab experiments (Change detection and apparent motion). CogLab (http://coglab.wadsworth.com) is an online laboratory from Wadsworth Publishers where instructors can set up specific instructions for their own students via a simple registration process. A variety of topics of cognition have interactive experiments where instructors can view data collected from their students. Although primarily cognitive psychology experiments, there are also experiments relevant to perception, including change detection and apparent motion. This may be a good alternative or supplement to traditional laboratory sessions.

Activities for Topics in Audition

Auditory perceptions demonstrations. Several demonstrations are provided and described, all using common, easily accessible materials. The first localization demonstration is an activity showing the interaural time difference involving sound localization when a length of hose is tapped at various locations. The frequency and pitch demonstration involves pouring water into a metal pipe, a quick and memorable demonstration of the relationship between frequency and pitch. The final demonstration investigates sound traveling through air versus other media (a coat hanger), to demonstrate the difference between sound waves in air and ossicle bone vibrations.

Demonstrations of auditory concepts. This is a comprehensive collection of demonstrations of 39 auditory effects, including critical bands, sound pressure, auditory illusions, masking, timbre, pitch, echoes, and binaural effects. The compact disc comes with a booklet detailing the concepts behind each demonstrated effect, transcripts of the commentary for each track, and references. Students have indicated this CD provides concrete examples for abstract auditory concepts. The CD is affordable and available for purchase at http://asa.aip.org/discs.html


Tactile Activities

Dowels and object perception. This demonstration involves using small dowels or probes (chopsticks may also work) to explore a wide variety of objects while blindfolded. Students can use tools to passively explore the objects, which vividly contrasts to actively exploring the objects with their hands. Students can then identify which mechanoreceptors were involved in the passive and active object recognition tasks. Reflection papers, discussion forums or touch profile worksheets can be assigned.


Tactile illusions and demonstrations. This article reviews 20-plus published tactile illusions (e.g., size constancy, after effects, change numbness) and assesses their demonstrative ease. Some of the reviewed demonstrations have visual counterparts such as the Muller-Lyer effect, while others are cross-modal or tactile-specific. The article also provides detailed instructions for four tactile-specific illusions (the comb, fishbone, curved plate, and bump-hole illusions), all of which require few or no supplies and no more than moderate set-ups.


Activities for the Chemical Senses

Genetic taste strips. Students can test their genetic taste abilities using paper strips coated with phenylthiocarbamide (PTC: tests bitter tasters and supertasters), thiourea (bitter test), and sodium benzoate (may taste, sweet, bitter, salty or tasteless). Since genetics contribute to taste bud composition and sensitivity, differences in genetic taste abilities are an easy way to demonstrate why people have such highly varied taste preferences. These tests papers can provide students with a personal profile of their taste abilities and preferences. These papers are widely available online and are very inexpensive.

Smell identification test. The Smell Identification Test and/or the Brief Smell Identification Test quantitatively screen(s) olfactory function using a variety of scratch-and-sniff booklets. Answer keys are available, as are detailed instructions in the SIT Administration Manual (sold separately). Test booklets and manual are available at www.sensonics.com. The test booklets can be reused numerous times. This test is a valid, reliable, quick, self-screening procedure students can administer themselves.

General / Miscellaneous Topics

Weber’s law and the just noticeable difference. This exercise demonstrates that the just noticeable difference is a constant proportion rather than a constant number. Students are asked to first hold an envelope containing a quarter in one hand and an envelope holding several quarters in the other hand. The weight difference should be noticeable. When the quarters are placed inside shoes, however, the weight difference is no longer noticeable even though the difference in the number of quarters has remained constant. *Variations on this exercise could be created using any small object (e.g., erasers) and any 2 containers of varying weight (e.g., small cups vs. heavy mugs or buckets). Sequentially adding small objects to first the lighter container, then to the heavier container can yield quantitative values for calculating the proportion for the just noticeable difference for each container.


Hand dominance. The handedness demonstration kit from www.psychkits.com includes several activities of hand dominance, scoring sheets for data collection, and complete instructions. One activity involves using chopsticks to move a series of beads from one side of a plastic container to another. The time in seconds to move 10 large beads is recorded for both the left and right hands. Additional detailed laboratory activities involving hand dominance and brain symmetry, focusing more heavily on brain lateralization, can be found at:

Lab aids: Human senses kit. This laboratory kit from Lab Aids (www.lab-aids.com/catalog.php?item=8) contains a variety of activities involving chemical, tactile, and visual senses. It comes with copies of a lab manual, including instructions and data collection areas, and enough materials for dozens of students to participate over multiple semesters. The kit and instructions seem geared toward high school audiences, but can be adapted for use with any age group. Dividing and/or altering the instructions to customize them allows the demonstrations for olfaction, taste, and vision to be separated to fit course topics. *One suggestion to enhance the kit is to add a series of lifesavers of different flavors, but similar visual appearance (e.g., peppermint and spearmint). When tasted with the nose plugged, this vividly demonstrates the interaction of smell in our ability to taste. Musk-flavored lifesavers are a popular flavor in Australia and an interesting addition since most American students consider eating musk to be akin to eating perfume (an example of experience/top-down processing). With noses plugged, however, the effect is eliminated. Musk-flavored lifesavers are available online from a number of Australian candy stores.

Online companion website for sensation and perception. The online student companion website for the Wolfe, Kluender, & Levi’s Sensation and Perception text provides chapter by chapter demonstrations and examples at www.sinauer.com/wolfe/home/startF.htm. This site is freely available to everyone, even without adopting this specific text. It provides a good supplement to any Sensation and Perception book the instructor chooses to use.
Engaging Students in Cognitive Psychology

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There are several challenges in teaching a course in cognitive psychology. First, the material typically covered in a cognition class is fairly abstract. For example, concepts such as phonological buffers, semantic networks, and schemata may seem less tangible to students than the concepts from many other psychology classes. Thus, there is a challenge to make abstract material more accessible.

Second, cognition presents a challenge due to the scientific, quantitative nature of the field. A deep understanding of the field requires students to have learned and be able to apply concepts from research methodology, including how experiments differ from other methods that psychologists employ, how instructions may influence data sets, and the use of statistical tests. Students who are not adequately prepared in these and related concepts may find the cognition course to be a significant challenge, which may reduce their level of engagement with course material.

Third, it is a challenge to convey the place of cognition in the history of psychology. Students often will not have taken a course in the history of psychology prior to taking the cognition course, and hence will be unaware of the cognitive revolution and the tensions between cognitive and behaviorist paradigms. Discussing the beginnings of modern cognitive psychology may convey the vitality of the field, but many instructors prefer to leave coverage of historical issues to the history course. Finding a way to convey the place of cognition within the history of psychology without losing excessive class time needed for other topics thus represents a challenge for cognition instructors.

Finally, cognition instructors face the challenge of developing a unified theme for the course. Typically, cognition courses include a wide variety of material, such as attention, memory, visual imagery, language, problem solving, and decision-making. Although such diversity may prove stimulating for some students, instructors are aware that retention of material is facilitated when the material is effectively organized. Thus, cognition instructors are challenged to present integrative themes that apply to several topics within the course.

While these several challenges are daunting to cognitive psychology instructors, addressing them effectively promises to engage students in the cognition course at deep levels. In the next section of this chapter, we present an activity that may be used on the first day of class. This activity intends to provide opportunities to make abstract constructs real, to demonstrate the quantitative nature of course material, and to establish several unifying course themes. The activity can also be used to develop an historical perspective if you choose to use the topic (levels of processing) in an account of cognitive psychology’s history during the past 50 years. The annotated bibliography of activities that we present in the final section promotes engagement in cognitive psychology precisely by offering activities that address the challenges.

New Activity

The first day of class is an important time to engage students in their study of cognitive psychology. Rather than outlining course topics, requirements, and policies (the standard script), an instructor may find that the following activity engages students and creates an experience she may cite throughout the academic term.

After welcoming students to your course, announce that you are going to demonstrate what cognitive psychology is about by doing an experiment on the relationship between personality and human perception. In fact, what you will demonstrate is the effect of levels of processing (Craik & Lockhart, 1972; Craik & Tulving, 1975) on memory for a list of words.

For the experiment you will need copies of the Need for Cognition Scale (NCS; Cacioppo & Petty, 1982; scale items are available in the publication), a scoring key for the scale, and a PowerPoint file available from Tom Pusateri for display of the words. The PowerPoint file also contains two sets of instructions serving also as response sheets that define the levels of processing. Shallow processing entails determining whether each word on the list contains an e; deep processing requires students to decide whether each word sounds pleasant (see Hyde
& Jenkins, 1969). In both cases students respond by circling “Yes” or “No” on a response sheet numbered for each word. Make copies of the NCS and its scoring key for each student. For half of the students make copies of one set of instructions, and copies of the other set for the rest of the students. Also, make a data sheet with spaces for an identification number, condition code, NCS score, and recall score. Add entries for any other variables that you like.

Begin by handing out the NCS. Tell your students that the scale measures the personality trait of interest. Instruct students to respond to scale items, then hand out the scoring key and have students score their answers. Next, initiate the experiment. Hand out one set of instructions to half of the class and the other set to the other half. Do this any way you like; “assignment to conditions” might be something you want to discuss. Violating the “random assignment rule” provides good grist for discussion.

Direct students to read the instructions that you have given them, darken the classroom, and activate the PowerPoint file, which presents 20 words one-by-one. After the last word, we have modified the program by inserting a slide that asks students to sing “Row, Row, Row your Boat” as an interpolated activity prior to a slide that asks students to write down the words they have just seen. They will sing, especially if you sing with them! After 30 seconds the prompt to remember the words will appear. Give students 90 seconds to remember as many as they can.

When the recall period is over, display the words students had seen and ask them to score their recall. When they have done that, ask students to count off (indicate who is number 1), then to enter that number, their NCS scores, their recall score, and any other information you want onto the data sheet you have given them. At this point you may want to look at the results. If you do – say by listing recall scores on a whiteboard or typing them into a spreadsheet displayed on a screen in class – you will find that there is almost no overlap between recall scores for the two conditions: Deep processing participants typically recall at least twice as many words as shallow processing participants. Inspecting the data for the influence of NCS is trickier, but however you do it, you will not find a correlation of recall and NCS in either condition.

By this time you will be well into the class period. Use remaining time to discuss the experiment. We first ask them what the NCS measures. After establishing that it measures motivation to think and solve problems, talk about how such a trait might influence performance in a cognitive psychology experiment. We suggest that you steer the conversation toward the view that the trait might interact with experimental conditions. High NC students might recall as well as low NC students in the shallow processing condition, or perhaps even less well, because the task (counting “e”s in words) is boring; but they might outstrip low NC people because they will think more deeply in the deep processing condition. Aside from those points, have students think about the logic of the experiment, how they should process the data, and about the quality of the procedure you used.

You will find that this activity engages students, introduces a compelling cognitive phenomenon, and provides excellent material for follow-up classes that also will give you information about your student’s preparation for studying cognitive psychology and their ability to work with the material. The activity may initiate a teaching cycle involving a demonstration, student reflection on the experience (e.g., by doing assignments based on the activity between classes), and discussion that becomes a productive pattern of teaching and learning that sustains student involvement in the course and promotes good study habits. There is much more that you may attempt than we have indicated here, which you will discover as you work with the activity to serve your own purposes.

Annotated Bibliography

Using Student Journals to Convey Bloom’s Taxonomy

The authors argue that educators have emphasized cognitive outcomes to the neglect of affective outcomes. Journal writing that encourages students to relate course concepts to their personal experience may be useful in helping integrate the two types of outcomes. Results suggest that students value the affective outcomes of journal writing, and these outcomes predict student evaluations. Student journals may be an effective means of engaging students in cognition.


Using Feature Films to Engage Students

Conner describes an activity in which students work in pairs to select a feature film that represented a topic in cognitive psychology. Afterwards, students wrote a 3-5 page paper that identified the cognitive topic, defined it, and gave examples from the film. Films such as Rain Man, Regarding Henry, and Monty Python and the Holy Grail may be particularly good choices for this activity. Having students
connect cognitive concepts to feature films may be an engaging way for students to learn and apply cognitive psychology.


Applying Memory Principles
To help students in a junior level introductory cognitive psychology course understand the application of memory principles, this project engages randomly constructed teams of 4-5 students in making memorable 2-3 minute TV commercials. Teams meet with the instructor twice during the semester to discuss their ideas and to present their commercials to the class at semester’s end. Student evaluations indicate that half of the students believe the project enhances their understanding of course materials, a rating that exceeds ratings of other course assignments. Instructor evaluations indicate that students nearly always apply the chunking and primacy/recency effects and typically employ repetition. Other techniques/concepts used include rehearsal, depth of processing, and cue dependence. Students ably apply memory principles to a practical problem creatively.


The Cognitive Revolution
Doing this project, students learn about the rise of interest in and research on human cognition and the relative decline of neobehavioral research. After introductory lectures on the history of cognitive psychology and scientific paradigms, students receive an assignment to photocopy the table of contents from one issue of each volume of the journal published during the 1950s, 1960s, 1970s, and 1980s. Students then classify every article in each issue as having a behavioral, cognitive or other approach. In a later class, students present and discuss their findings, which typically document a paradigm shift. Doing this activity students become aware of an historical perspective on the development of psychological thought. It exposes what they do not know about both cognitive and learning psychology and prepares students for future lectures.


Three Demonstrations on the Ease of Detecting Additions
The authors report three classroom demonstrations of the tendency to notice additions more than deletions. One involves adding or deleting an object from the classroom. The second involves a concept-learning task in which students are given a set of consonants that are examples of concepts and asked to identify the concept. In the addition condition, the concept is the presence of a given letter. In the deletion condition, the concept is the absence of a letter. The third presents students with paragraphs that either omit or repeat the letter "e." Collectively, the demonstrations illustrate the robustness of the effect.


Two Collaborative Projects
This article describes and compares two collaborative, semester long projects for a junior-level cognitive psychology course. Aims of the projects are the promotion of learning, group interaction, and student confidence and self-esteem. One project creates displays for a “Museum of the Mind,” the other writes chapters for a “Cognition Book.” Both projects involve teams of three students who sign up for 1 of 20 topics. “Museum” teams create interactive displays; “Book” teams write 2-page chapters on specific topics. Faculty or students judge both projects for prizes. Students learn the material they studied for their projects well. They believe the work helped them learn the project material and cognitive psychology in general and recommend the projects for future classes, although the “Book” teams enjoyed working together less than the “Museum” teams.


Six Computer Experiments
This laboratory describes how a computer cognition laboratory can demonstrate six well-known cognitive experiments in short-term memory (acoustic similarity effect, memory span), long-term memory (semantic similarity effect, elaboration and encoding), and decision-making (framing, heuristics). The laboratory is designed for a classroom setting.
Students complete the experiments at the beginning of the class, followed by a discussion of the procedure and presentation of individual as well as group results. Students identify independent and dependent variables in the experiments as well as null and research hypotheses. The laboratory is a useful tool that permits students to participate in multiple levels of the research process.


**Presentation Software Demonstrations**

Instructors may illustrate cognitive phenomena by using presentation software (e.g., PowerPoint). Neuhoff demonstrates how to create successive slides that present stimuli to generate the phenomena. Variations in use or programming of the slides can produce experimental conditions that enable instructors to demonstrate how psychologists do research on the phenomena. Neuhoff gives examples of presentations that demonstrate apparent motion, anorthoscopic perception, illusory conjunctions, and sensory memory. Presentation software's advantages over actual laboratory programs or instructional package programs are that they require no programming expertise and are easy to create and modify. In these respects they are superior to traditional teaching methods used to lecture about or simulate research.


**Using LEGOs to Teach Creativity**

To teach the psychology of creativity, students are exposed to lectures on various aspects of creativity, followed by three sessions in which students interact with LEGO bricks. The first session is unstructured play, followed by sessions in which students are given constraints on process and then constraints on products. Students keep a metacognitive diary throughout the sessions.


**Cognitive Links to Helping Professions**

An effective way of engaging students is to connect course material with student interests. Since many psychology students are interested in helping professions such as clinical and counseling psychology, linkages between these fields and cognition should be fruitful. Sternberg and Dennis demonstrate how cognitive concepts may help students understand abnormal behavior, stereotyping and prejudice, psychotherapy, and persuasion. For example, cognitive therapists attempt to identify and change maladaptive patterns of thinking in their clients. By using examples from the helping professions, teachers of the cognition course can provide links that will make the course relevant to students on a personal level.


**Teaching Cognitive Heuristics**

Students learn about the representativeness, availability, simulation, and anchoring/adjustment heuristics for making social judgments in this class activity. In the last five minutes of the class preceding the class in which students will learn about these heuristics, the instructor has students make social judgments typically driven by them. The scenarios describe situations relevant to college students, thus demonstrating that they use heuristics in their own social perceptions. Discussion in the next class meeting robustly demonstrates that students rely on the representativeness, simulation, and anchoring/adjustment heuristics. The scenario involving the availability heuristic sometimes produces chance choices between the heuristic- versus logic-driven judgment. Data from introductory and social psychology classes demonstrate that it enables students to identify which heuristics apply to definitions of social behavior.


**Ten Cooperative Learning Activities**

Cooperative learning compares well with lecturing for teaching college students. To begin this activity, randomly assign three students to mixed sex groups. Giving groups extra credit for high test scores encourages all group members to participate. Groups remain constant or change during a semester. Group activities focus on answering questions or performing tasks. Activities require 5 to 10 minutes and illuminate the same material as a lecture would. The authors sketch 10 activities, designated as “problem solving and analysis” or “synthesis and construction” activities, designed to enhance learning about the history of psychology, perception, memory, mental imagery, problem solving, decision-making, and reasoning. Students report they work as a unit, share ideas, encourage each other, and help each other learn.

**The Cognitive Revolution**

This class activity for beginning and advanced courses illustrates the rise of cognitive psychology in the 1960s. Using the bibliographies from Neisser’s 1967 *Cognitive Psychology* and Hilgard and Bower’s 1966 *Theories of Learning*, students work in groups of six to count the texts’ citations from each decade between the 1890s to the 1960s. The course instructor tabulates results and compares them to the correct number of citations from each decade. The result demonstrates the spurt of cognitive research in the 1960s compared to behavioral research. The activity also provides an early semester “ice breaker,” teaches students the danger of careless data tabulation, provides memorable results, fosters discussion of the interpretation of the data, and impresses students with Neisser’s achievement.


**References**


Undergraduate courses in Motivation and Emotion cover a range of topics including various physiological, cognitive, and environmental forces that affect human and animal behavior. Motivation describes the forces acting on or within an organism to initiate and direct behavior; motivation also describes the differences in intensity of behavior. Generally authors introduce students to biological foundations, internal and external factors, the role of cognitive processes and emotional processes (psychological, biological, and cultural). All in all, students should finish such a course with a very broad understanding of the complex interaction between biology, culture, and psychological processes that induce our actions, feelings, and thoughts.

Generally a motivation and emotion course is offered as a junior-senior level elective course; it can also be a requirement along with other courses that focus on basic psychological processes (e.g., cognition or perception). I worked at an institution where the psychology department offered a motivation course as one of four courses in one subarea and students chose three of the four to fulfill their requirement. That institution also permitted the motivation course to serve as an upper-division general education course. As a result, I often had a large class comprised almost entirely (in some years) with non-majors. In that respect the course was similar to an introductory psychology course. In such cases the faculty member must recognize that students' background might be a factor in how the course is taught, including the sophistication of class discussions. On the other hand, since the topics covered in a motivation course are also discussed in other courses (e.g., biological drives for hunger are discussed in a neuroscience course), having psychology majors in the course is a positive factor since the instructor can build upon students' knowledge.

In this chapter I present demonstrations and activities that dovetail with the major concepts typically covered in a Motivation and Emotion course. As many students who take a motivation and emotion course may not be psychology majors, I try to focus on topics to which they can easily relate; I use these topics as a way to teach students about various internal or external motivational factors (e.g., drive theory). Faculty who teach motivation may vary considerably in the topics they present as well as how they present the material; some textbooks present more traditional coverage of motivational systems and theory (e.g., drive theory) while others are more topic focused (e.g., hunger, within which drive theory may be one point of view addressed). When I teach motivation, I emphasize behavioral genetics, with a particular focus on the way nature-nurture interactions relate to eating, drinking, sexuality, work, leisure, additions, etc. The activities I share are general enough to be successfully implemented in an Introduction to Psychology course or courses that specifically cover emotion.

**Topical Areas in Motivation and Emotion**

**Social Processes and Social Motivation**

The goal of this activity is to illustrate to students some of the principles of decision-making. In this paper the author describes an activity to teach students about avoidance-avoidance conflicts. Students experience the conflict between choosing between two attractive alternatives as opposed choosing between two undesirable alternatives. For instance, students consider whether they would rather be less intelligent or less attractive. Students make up a series of approach-approach and avoidance-avoidance choices. Generally students take longer to make decisions about avoidance-avoidance choices and rate the avoidance choices less satisfactorily. The author discusses ways to integrate into class discussions about loss aversion, decision-making, and negative self-evaluation.

**Homeostatic Processes**

Body temperature and reaction time. The objective of this activity for students to learn about the circadian rhythms. Students monitor the effects of their circadian rhythms on reaction time by monitoring body temperature and playing a game of jacks over a two-day period. The student should get an appreciation of the impact that biological rhythms have on their behavior. After students have collected the data on reaction time and body temperature, they answer a series of questions. The specific directions for this activity and the questions can be found at: [http://www.cbt.virginia.edu/tutorial/CLASSACT.htm](http://www.cbt.virginia.edu/tutorial/CLASSACT.htm)

**Addiction**

The objective of this activity is to help students understand the more complex models of addiction using a simulation to illustrate addictive behaviors. In this activity students are exposed to the biological-psychological-social model of drug addiction. The simulation allows students to experience and understand the interaction of the biological, psychological, and sociological processes of drug addictions and the effects on the addicts themselves. An outline of the exercise is presented and student reactions to the exercise and recommendations for teachers are discussed


The objective of this exercise is to help make students aware of the some of the reasoning fallacies people hold about addiction. Students generally have parochial views about addiction and do not consider the various biological and cultural factors that lead to and sustain it. This activity is easy to perform and shows students how easy it is for one to succumb to powerful psychological factors. The activity uses a deck of cards and a dollar bill to showcase the illusion of control so apparent in gambling.


**Anxiety and Fear**

The purpose of this activity is to allow students to directly experience the process of systematic desensitization. Systematic desensitization is an effective way to reduce peoples’ anxiety. The exercise described in this paper actively involves members of an introductory psychology course experiencing the benefits of systematic desensitization firsthand. Students hold a rat’s transparent box and also witness peer-volunteers as they actually hold the animal. The paper empirically validates that even mild exposure (holding the box) significantly lowers anxiety.


**Aggression**

The goal of this activity is to help students learn more about operational definitions by focusing on the topic of aggression. This activity invites students to actively discuss various meanings of aggression using a questionnaire to guide discussion. Students consider whether twenty-five behaviors (e.g., a spider eats a fly) are forms of aggression. This activity. It is effective in both small and large classes. The activity, depending upon discussion, could engage students for 30 to 40 minutes. Faculty may also want to integrate into the discussion several definitions of aggression given by psychologists (e.g., behavior intended to hurt another person).


The main objective of these exercises is to strengthen students’ ability to recognize social instigators of aggression. Students are presented with 12 aggression instigators (e.g., insult, attack, aggressive models, etc) and asked to find scenes of violence in movies that show the effects of the instigators. It is a great activity to connect the seriousness of the discussion to something that they all already familiar with. For example, students will be able to think about instances in which they have become angered and can use this activity to help them to better understand the factors that lead to their anger.


The primary learning outcome for this activity is for students to learn about different explanations of aggression by considering particular social and political factors that may contribute to war. This creative activity asks students to read the 1932 exchange “Why War” between Albert Einstein and Sigmund Freud; students must respond to both authors by writing each a two-page response. Students are asked to agree or disagree and to comment on the perspectives of human aggression as stated by the Einstein or Freud. One benefit of the activity is that the letters contain a mix of history, psychology, and personal opinion, giving students a chance to consider a broad view of human aggression.
Sleep and Wakefulness

Students are always interested in dream interpretation. One major faculty objective is to help students to distinguish between anecdotal dream analysis from legitimate attempts to understand dreams, especially as a way to understand unconscious motives. In this exercise the author describes an activity that helps students learn how prior knowledge, expectations, and other conceptually-driven processes affect dream interpretation. The activity takes about 15 minutes and involves the whole class; it can be easily adapted for an introductory course or be used in upper-level courses.


Sleep is a favorite topic of many students and students eagerly share their own sleep habits and dreams. Students normally do not think of dreaming and sleep as motivational behaviors. This activity invites students to respond to a questionnaire about sleep and dreaming to gather data about their knowledge of these topics. The answers students provide make for an effective class discussion. Easily adapted for large classes.


Dream diaries. This activity can be used to relate motivation to biopsychology by encouraging students to use the activation-synthesis model or the clinico-anatomical hypothesis to interpret the dreams. I have done this activity in several classes and always get a wide range of interesting student feedback. Although some students prefer discussing their own dreams amongst themselves, prepare to be asked by many what the "true" meaning or interpretation of a particular dream is. Approximately 2 weeks before the chapter on sleep and dreaming is discussed, tell your class to start keeping a dream diary. Encourage students to keep a pad of paper and pencil near their bed so they can write down any memory of a dream upon waking up. After 2 weeks of keeping the diary, tell students to break up into groups and discuss one or two of their dreams with the other group members. The other students in the group should be instructed to give an interpretation of the dream.

Motivated Cognition

When teaching about emotion theory, a principal objective is to convey the significance that cognitive processes play in the representation of emotional experience. This activity allows students to actively experience how their current state of mind can alter their emotional experiences. Students visualize having just ended a significant romantic relationship. The activity allows students to see how experimentally induced feelings of anger or sadness can affect their self-reported feelings after the exercise. All in all, the exercise uses only 10 minutes of class time; the author provides evidence of its effectiveness in lower and upper-division courses.


This activity illustrates to students the basic tenets of the James-Lange Theory of Emotion. This activity demonstrates the facial-feedback hypothesis. This hypothesis predicts that the perception of emotion should change as a function of our own facial expressions. Students hold a pencil (or pen) in their mouths in such a way as to force either a smile or frown and then are asked to rate how funny a set of cartoons is.


Stress and Health

This paper describes some of the validation and establishment of norms for College Undergraduate Stress Scale. It can also be easily administered in class and used to discuss with students events that most often cause stress among college students.


Sexuality

I use this exercise when I introduce sexual attitudes. This exercise requires students to label specific examples of sexual behavior either normal or abnormal. I have used it on numerous occasions and it allow students to balance what may be “abnormal” from a psychological point of view with what may be judged by society as “abnormal.” Students can work in groups or individually; upon completion of the exercise, you can tabulate the results on the chalkboard. Ask students if they experienced any difficulty labeling certain behaviors as normal or abnormal. What ultimately influenced their decisions?

This activity explores the complexity of sexual orientation. In the exercise, students categorize the sexual orientation of 10 fictional people, some of whom present discrepancies between different aspects of sexuality. The exercise should illustrate the difficulty in using rigid categories of sexual orientation and stimulate discussion.


**Work Motivation**

This activity demonstrates that the level of aspiration and achievement motivation depends on several variables such as intrinsic motivation and rewards as well as extrinsic motivation and rewards. All the instructor needs is two coffee cans and sixty marbles. While only four students can actively participate, it nevertheless is a fun activity for the entire class. The author offers advice on incorporating the results into a discussion about achievement theory.


**Emotion**

The polygraph test. This activity illustrates autonomic properties of emotion to students. Recruit a student volunteer for a brief polygraph demonstration (many large universities have a polygraph available; systems such as BioPack also would work). Be sure to begin the demonstration by asking baseline questions (regarding name, age, occupation, etc.). Afterwards, begin asking questions of interest (some topics to consider would be past or present illicit drug use, past criminal activity, study habits, etc.). The demonstration works best if student volunteers take the subject matter seriously and try to answer sincerely.

To tell the truth. Nonverbal cues are important to emotional behavior. This activity allows students to see firsthand how nonverbal cues may be indicative of deceptive behavior. Using a set of questions given by the author, student volunteers lie on some questions and students must decide who is being deceptive. Some students are given specific hints at identifying deceptive behaviors and other students are given no such help.


Cultural differences in emotional descriptions. This activity shows that despite similarities between cultures in expressing some emotions, dramatic differences do exist. Klineberg (1937) found several unique emotional expressions in Chinese literature published in the 1930s. Some expressions are very similar to the way Americans express the emotion, and others are unique. Using a list of emotional expression provided by the Klineberg, ask students to guess what emotion is being portrayed.

Is Your Educational Psychology Class Boring? A Review of Teaching Methods to Engage Your Students

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Judith Warren Little, an educational researcher, once said: “School improvement is most surely and thoroughly achieved when teachers engage in frequent, continuous and increasingly concrete talk about teaching practices…” (Hammonds, 2010). In the spirit of continuing this critical dialogue, I have researched and reviewed a number of articles, which exemplify best practices to engage students in educational psychology courses.

I use many types of activities to engage students in educational psychology. For example, I have used children’s picture books to enhance instruction. Specifically, I have used the book Leo the late Bloomer by Robert Kraus (1971) to introduce educational psychology theory. This book also builds background knowledge, makes theory concrete and understandable, and creates images of concepts for students. Most importantly, it helps students make connections between the class lesson and real-world application of common theories of psychology (e.g., biological, psychodynamic, sociocultural, cognitive developmental, behavioral). Students read the story, then break into groups to discuss the above mentioned concepts. After 10 minutes of group discussion, students present their responses orally to the entire class and engage in another round of discussion and debate. Because of the engaging material in the books and how easily it applies to the concepts, my students are often completely immersed in the activity.

Using the above example as an exemplar, I selected 14 excellent articles designed to engage students in educational psychology to review and annotate. Then, all the articles were summarized into one easy-to-use table (see Table 1). Finally, the chapter ends with a general critique of the reviewed articles and directions for future research as well as suggestions for practitioners.

Table 1. Summary of Articles on Engaging Students in Educational Psychology

<table>
<thead>
<tr>
<th>Citation</th>
<th>Topic</th>
<th>Activity Type</th>
<th>Method Assessed</th>
<th>Learning Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alderman &amp; Beyeler (2008)</td>
<td>Motivation</td>
<td>Discussion, Writing</td>
<td>Descriptive</td>
<td>Yes</td>
</tr>
<tr>
<td>Boyatzis (1998)</td>
<td>Math Instruction</td>
<td>Collaborative project</td>
<td>Descriptive</td>
<td>No</td>
</tr>
<tr>
<td>Ceynar Rosell (2004)</td>
<td>Social &amp; Emotional</td>
<td>Discussion, Observation, Role Playing</td>
<td>Descriptive</td>
<td>Yes</td>
</tr>
<tr>
<td>Cohen (1984)</td>
<td>Motivation</td>
<td>Discussion, Demonstration, Writing</td>
<td>Descriptive</td>
<td>Yes</td>
</tr>
<tr>
<td>*Deemer (2009)</td>
<td>General</td>
<td>Interviews, Writing</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>*Engle &amp; Faux (2006)</td>
<td>General</td>
<td>Case Study, Discussion</td>
<td>Inferential</td>
<td></td>
</tr>
<tr>
<td>*Florez (2010)</td>
<td>General</td>
<td>Case-Based Instruction</td>
<td>Inferential</td>
<td>No</td>
</tr>
<tr>
<td>Hagan &amp; Richmond (2009)</td>
<td>Constructivism</td>
<td>Writing, Role Playing, Demonstration</td>
<td>Inferential</td>
<td>Yes</td>
</tr>
<tr>
<td>Hanich (2009)</td>
<td>Motivation</td>
<td>Interviews, Discussion</td>
<td>Descriptive</td>
<td>No</td>
</tr>
<tr>
<td>Harper (2009)</td>
<td>General</td>
<td>Discussion</td>
<td>Descriptive</td>
<td>No</td>
</tr>
<tr>
<td>Jeffries &amp; Maeder (2006)</td>
<td>General</td>
<td>Discussion, Vignette</td>
<td>Inferential</td>
<td>Yes</td>
</tr>
<tr>
<td>Nirula &amp; Peskin (2008)</td>
<td>General</td>
<td>Case Study, Films</td>
<td>Descriptive, Inferential</td>
<td>Yes</td>
</tr>
<tr>
<td>Ormrod (2005)</td>
<td>General</td>
<td>Discussion, Case Study, Student Artifacts</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>*Reynolds-Keefer (2010)</td>
<td>General</td>
<td>Discussion, Observation, Writing</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>*Seifert (2010)</td>
<td>General</td>
<td>Writing</td>
<td>Descriptive, Correlation</td>
<td>Yes</td>
</tr>
<tr>
<td>Sugar &amp; Livosky (1988)</td>
<td>General</td>
<td>Observation, Writing</td>
<td>Inferential</td>
<td>Yes</td>
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<tr>
<td>Suter (1991)</td>
<td>General</td>
<td>Discussion, Assessment</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>*Vacc &amp; Pace (1983)</td>
<td>Special Education</td>
<td>Writing</td>
<td>Inferential</td>
<td>No</td>
</tr>
<tr>
<td>*Zambo (2007)</td>
<td>General</td>
<td>Action Research, Writing</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Zambo &amp; Hansen (2005)</td>
<td>General</td>
<td>Case Study, Demonstration</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Note. (*) denotes articles that were not fully annotated.
Annotated Bibliography

Upon a thorough review of the articles, five major themes emerged for improving student involvement in educational psychology courses. These themes included how to use technology as an engagement tool; how to use experiential learning to engage students; how to use illustrative examples to engage students; how to engage students out of the classroom; and how to engage students through classroom discussions.

Lions, Tigers, and Technology...Oh My! Using Technology to Increase Engagement

Technology is quickly becoming one of the most popular modes of engaging students in the classroom. Technology as engagement tools discussed in this section range from the use of electronic feedback systems more commonly known as ‘clickers’ (Harper, 2009) to the use of video-capture technology to record interviews (Nirula & Peskin, 2008).

Using technology-enhanced feedback. Over the course of two studies, Harper (2009) investigated whether two separate technology based feedback systems could enhance engagement in an educational psychology course. In the first study, Harper provided one class oral (digitally recorded) feedback on both in and out-of-class written assignments and provided the other class general written feedback. The qualitative results reveal that students believed the digital feedback was more personal, easier, gave a sense of confidence to the student, and was perceived as beneficial. Students who received the digital feedback also had a general trend in increased perceived competence, autonomy and intrinsic motivation. In the second study, clicker technology was used to enhance engagement. One class was trained how to use clickers (electronic feedback from students) during class lessons, while another class did not use clickers. Descriptive data suggested that those who use the clickers had higher rates of class enjoyment, slightly higher academic performance, and higher attendance. Students were also more prepared by reading and had increased verbal responses when compared to the class who did not use the clickers.

Video-capture of expert teachers. Nirula and Peskin (2008) presented two studies that attempted to utilize video case studies to demonstrate expert teachers’ reflections on case studies. In the first study, students in an online class watched a series of videos of expert teachers thinking out loud while they read two case studies. Students then participated in several online discussions about the video case study. Descriptive data suggested that the videos helped students apply class content to the elementary classroom, caused students to be more confident about their own ability to teach, and clarified their understanding of class material. In the second study, secondary education students either discussed the application of the case studies and wrote a brief paper (control group) or watched the video-capture of the expert teacher. Next, students briefly discussed the case study and wrote a brief paper (experimental group). Again, when students used the video-capture technology, they were able to apply class content, were more confident in their ability to teach, and understood class material better than the control group. Additionally, students who received the video-capture wrote significantly more than students in the control group. The authors suggested that video-capture is a valuable tool for enhancing engagement and teaching in educational psychology classrooms.

Living is Believing: Using Experiential Learning to Engage Students

Over 2000 years ago Julius Caesar (52 B.C) said: “Experience is the teacher of all things.” Thus, educators have effectively used experiential learning as an instructional tool. Described below are four exemplars of experiential learning used in educational psychology classes (e.g., Alderman & Beyeler, 2008; Ceynar Rosell, 2004; Cohen, 1984; Hagan & Richmond, 2009).

The motivational toolbox. In an innovated class activity, Alderman and Beyeler (2008) focused on how to motivate students to learn motivation theories. The authors engaged students by having them analyze their own learning about motivation theory, and reflect on their own motivation and how they may motivate their future students. Through cooperative learning activities, classroom assignments, and classroom observations the authors had students create a large class assignment dubbed the “Motivation toolbox.” Students wrote five personal motivational tools that they use and that they would have their future students use. For each tool, students were required to write a definition and purpose of the tool. For example, some students described goal setting and self-efficacy tools for themselves while creating attributional feedback and learned helplessness tools for their students. In a qualitative analysis, students reported that the assignment was useful, made the material concrete, and understood how to apply the course content to real-world situations.

Role playing bullies. In a creative role playing activity, Ceynar Rosell (2004) had students act as parents affected by bullying in their school to demonstrate and experience how future teachers
were incidents of bullying, and if so, how severe.

For the educational psychology class and about a
assignment, students were asked to describe goals.

Students acted as parents to discuss whether these
were incidents of bullying, and if so, how severe.
They also considered if bullying is different for boys
than girls. Students reported that the activity was
interesting, that they enjoyed the discussion,
believed it to be a good use of class time, and
wanted to participate in more role-playing activities.
No data was reported on whether the activity
increased knowledge of bullying and bullying
prevention.

Reflecting on and experiencing your own
motivation. Cohen’s (1984) experimental study was
intended to not only demonstrate and enhance
knowledge of intrinsic motivation in the elementary
and secondary classrooms, but to motivate students
themselves in educational psychology. Cohen used
three activities to achieve these goals. In the first
assignment, students were asked to describe goals
for their educational psychology class and about a
past learning situation that was exceptionally
motivating. They then engaged in a 10-minute
highly structured, yet ambiguous, tension causing
activity. Students then contrasted (in group
discussion) the two activities. The instructor
facilitated the discussion to illuminate the
differences between intrinsic and extrinsic
motivation.

In the second assignment, students analyzed
their initial goals for the class using the motivation
theory. This analysis continued throughout the
semester when appropriate dilemmas occurred
between goals and course objectives. In the third
assignment, students completed a classic experiment
(see Deci, 1975) to demonstrate the difference
between intrinsic and extrinsic motivation. Students
reflected on the results by discussing how they
relate to various motivation concepts. As a result of
these three assignments, the course and teacher had
significantly higher ratings when compared to a
class that did not experience these assignments.
Cohen did not evaluate the efficacy of these
assignments on students’ knowledge of motivation
theories.

Constructivism taught constructively. Hagan
and Richmond (2009) conducted a study to assess
whether teaching educational psychology students
constructivism (i.e., individuals construct
knowledge by incorporating their experiences with
new information into previously learned concepts;
Byrnes, 2007) in a constructive manner would affect
the way students learned and viewed the teaching
method. During a semester, 34 students were taught
the theory of constructivism by experiencing a
modeled constructivist lesson. Students were asked
to create and perform a constructivist micro-lesson
(e.g., teach math to first graders by using the
manipulative of counting candy), evaluate and
critique micro-lessons, and write a reflection paper
on the micro-lesson, as well as write a theory paper
on the pros/cons of constructivist theory based on
their personal experience. Students made significant
pre-to-post gains (over 8 weeks) in their academic
and self-reported knowledge of constructivist
theory. Additionally, students reported that they
enjoyed being taught constructively.

I Can See Clearly Now The Rain is Gone:
Engaging Students Through Illustrative Examples

Using illustrative examples, such as the case
study method to teach educational psychology is
widely used and proven to be effective (Engle &
Faux, 2006; Florez, 2010). Additionally, students
have reported that these methods are engaging,
additive to student learning, and useful for providing
important feedback (Smith, Malkani, & Yun Dai,
2005; Zambo & Hansen, 2008). Therefore, three
elements of these methods are annotated below.

Instructional and assessment vignettes.
Jeffries and Maeder (2006) conducted a randomized
experimental study to assess the effectiveness of
using vignettes to teach educational psychology.
Jeffries and Maeder questioned whether the use of
vignettes would improve content knowledge and
result in transfer of course material to the classroom.
Over the course of several weeks students were
taught educational psychology concepts using no
vignettes (control), summarized text passages,
vignette only, or either a scaffolded evaluation
focused vignette or a scaffolded synthesis focused
vignette. Eight topics were taught using these
methods (e.g., vicarious learning, self-regulation,
locus of control). Half of the topics were taught
face-to-face, and the remaining half was taught
online. Results indicated when students received
vignette instruction, they had significantly higher
academic performance and transfer of learning
material than students who were taught via a non-
vignette method. Additionally, students reported that
the vignettes helped them learn and transfer course
material.

Student artifacts as case studies. With the
purpose of applying classroom material to the K-12
classroom, Ormrod (2005) provided four detailed
examples of student and teacher artifacts (i.e., using
actual examples of student’s work and teacher’s comments of student) to be used as case studies. These artifacts covered topics such as learning strategies, metacognition, self-regulation, motivation, instructional strategies, and how to teach social studies. Specifically, the “Warhawks Artifact” is an eleventh-grade history oral report of the War of 1812. In the artifact, students could learn about how the students conceptualized history and the events in the war. It was used as a practical tool to create discussion on topics such as learning strategies, epistemological beliefs, and general concerns with high school social studies education. While an interesting exercise, there is no supporting data to validate the efficacy of using such methods.

**Picture books illustrate educational psychology concepts.** In this well documented article, Zambo and Hansen (2005) described several ways to use children’s picture books to demonstrate and illustrate educational psychology concepts. The authors defend the motivational and cognitive benefits of using picture books and how to select and use the picture book. For example, the *Lilly’s Purple Plastic Purse* (Henkes, 1996) or *A Weekend with Wendel* (Henkes, 1986) can be used to make Piaget’s theory more understandable and create images of Piagetian concepts such as preoperational thinking. A detailed matrix of picture books and corresponding, theory, concepts and/or vocabulary was provided. One drawback to this article is that there is no data to evaluate the effectiveness of using this method.

**Out of Sight, Out of Mind: How to Engage Students Out of Class**

Although much of this chapter is focused on how to engage students in class, there is a great deal of learning that occurs outside of class. Consequently, a number of well documented out of class assignments can be used to engage students (e.g., Deemer, 2009; Hanich, 2009; Reynolds-Keefer, 2010; Seifert, 2010; Sugar & Livosky 1988; Vacc & Pace, 1983; Zambo, 2007). A select few of these articles are annotated below.

**Using student interviews as instructional tools for motivation.** In a descriptive study by Hanich (2009), students completed an out of class assignment which focused on using student interviews to bridge the gap between theories of motivation and the practice of those theories. Graduate students in an educational psychology course selected at least two students from a K-12 classroom to interview. The students created their own sets of questions and protocol for interviewing. Some students focused on motivational concepts such as goal orientation while other students choose to focus on motivational experiences. Students then transcribed the interviews and wrote a short paper summarizing what they learned. In class, students then formed groups and created a grading rubric to be used for assessing the assignment. Although no data was collected on assessing the efficacy of this assignment, students did report being motivated, having high interest and found value and enjoyment in this assignment. Many of the students also reported that the assignment was useful for understanding motivational theory and connecting it to the real world.

**Using a preschool journal to engage your students.** This article by Sugar and Livosky (1988), described how students could use a preschool journal to chronicle their observations and apply course content. After each observing preschool children for 1-2 hours per week, students applied their observations to content covered in class. For example, if students were learning about motor development, they then wrote about how their observations exemplified theories of development. The authors provide suggestion for setting up the observations, how to grade the journals, and discuss liability and ethical issues associated with this activity. The efficacy of this activity was not inferentially tested. However, students who elected to do the assignment did tend to increase their academic performance.


As illustrated in the cult classic movie *Ferris Bueller’s Day Off* (1986) it can be extremely difficult to engage students through classroom discussions. Fortunately, creative instructors have developed a few activities to engage students through discussions (e.g., Boyatzis, 1998; Suter, 1991).

**Using cultural diversity to increase engagement.** Boyatzis (1998) conducted a descriptive study to investigate the implementation of discussions and a collaborative project designed to demonstrate how culture plays an important role in child development and elementary and secondary education. In two class periods, students read journal articles comparing math achievement of American and Asian students. They individually wrote an analysis of the cultural differences using Bronfenbrenner’s ecological model and discussed (in groups) the cultural differences. Then, they formed heterogeneous groups to write a collaborative essay. In the final collaborative project, group members first generated a list of reasons for cultural differences in math performance and then generated five proposals to improve U.S.
math performance. Although the efficacy of this activity was not tested, students did report that the assignment helped them learn about cultural differences in education and understand the ecological model, enjoy the collaborative feature of the activity, and students rated the educational value as excellent.

Using the What Works Test to illuminate misconceptions. Suter (1991) used the assessment What Works (USDE, 1987) as a starting point to discuss student misconceptions of learning and classroom instruction. On the first day of class, Suter had students complete the 10-item true/false What Works test. At the completion of the test, Suter provided the correct answers and explanations for these answers. Subsequently, items such as “Moderate television viewing can help children learn (true).” (p. 43) were used throughout the semester to first introduce topics then to engage students in discussion on the relevant research, methods for collecting data, and other concepts in educational psychology. Suter did not collect any descriptive, inferential, or qualitative data on this activity.

Suggestions for Future Research

While there are a number of well-documented studies that explicate how to engage students in educational psychology (e.g., Hagan & Richmond, 2009; Nirula & Peskin, 2008), there remain a number of concerns with these studies that may be improved upon in future research. First, there is a lack of research that addresses unique and specific concepts in educational psychology. Outside of motivation and general educational psychology topics, only four of the 20 articles reviewed, investigated specific concepts. Future research should focus on methods for engaging students in other educational concepts (e.g., behaviorism, group and individual differences, instructional strategies). Second, many of the articles reviewed, lacked ample description of “how” to actually perform the activities in class. Obviously this may be a result of limited space in print material; however, for instructors to implement these engaging activities, a modicum of description of procedure is necessary. Lastly, as illustrated in Table 1, much of the research reviewed did not assess the efficacy of the described instructional strategy. Although not absolutely necessary, evidence-based practices do increase the rigor and vigor of teaching in educational psychology.

Conclusion

Aptly stated by John Goodland “A teacher's failure to create an intellectually reflective, engagement for learning is not simply malpractice but it is immoral” (Hammonds, 2010, paragraph 4). This embodies my belief that as instructors of educational psychology, it is incumbent upon us to seek the best practice on how to impart knowledge to our students. Hopefully, the information contained in this chapter will, in part, do just this: help make us better teachers by engaging our students.

References


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This chapter offers suggestions for in-class activities, homework assignments, and resources that psychology and education professors can use to engage students in learning about the complex and controversial topic of human intelligence. It is rare to find intelligence-related activities in the literature, perhaps because theories of intelligence usually rely on abstractions and statistical models that do not easily lend themselves well to experiential approaches. Moreover, there is the danger that in-class activities may oversimplify complicated material, leading students to develop misconceptions and/or overgeneralizations. This is especially true in undergraduate courses where students may have little or no background in psychology or psychometrics before being introduced to this topic. The following activities were selected because they have proven (at least anecdotally) useful as preliminary steps in longer pedagogical processes. Careful attention was paid also to the needs of faculty in schools and colleges of Education, who are preparing future teachers to understand the relevance of intelligence theories for their future classroom practice.

Multiple Intelligence Activity for Pre-service Teachers

Objective: To help teacher education students experience some practical pedagogical consequences of Gardner’s (1983/2003) multiple intelligence theory.

Students use a self-rating scale (like the one described below) to identify their strongest and weakest intelligences based on Gardner’s theory. They are then placed in groups according to their strongest intelligence. For example, students who believe they are strongest in spatial intelligence are placed together. Each group is then given an unrelated topic that they might teach to a group of their own students in the future (e.g. causes of the civil war). Each group must come up with three ways to teach their assigned topic to students who share their strongest intelligence. For example, teacher education students in the strong spatial intelligence group must design three pedagogical strategies which use spatial intelligence to teach causes of the civil war. This is generally a relatively easy task, as the assignment closely aligns with their personal strengths.

Students are then re-grouped by their weakest intelligence. For example, students who believe they are weakest in spatial intelligence are placed together. The new groups are then given another topic that they might teach in the future. They must then come up with three ways to teach their assigned topic to students whose strongest intelligence is their weakest. For example, the future teachers in the weak spatial intelligence group must teach causes of the civil war in spatial ways. This task is usually substantially more difficult since it targets an area of weakness. The class should come together at the end to debrief.

Multiple Intelligence Self Rating Scale

Objective: To help students identify their multiple intelligence profile.

This resource provides a self-rating scale students can use to rate their strengths and weaknesses using Gardner’s Multiple Intelligence Theory (1983/2003). Students are encouraged to reflect about their strengths in terms of their past life experiences and future career goals. Existential intelligence is not included in the rating scale.


Personal Definition of Intelligence

Objective: To introduce students to the challenges of defining and measuring the construct of intelligence.

In this activity, readers think of the most intelligent person they know (living or dead, friend, relative, or famous person). They are then asked to write a list of characteristics that make this person “intelligent.” When they have completed their list, they use it to create a personal definition of intelligence by filling in the blank, “Intelligence is ________.” The chapter then suggests that students compare responses to look for similarities and differences. This small activity could be expanded into a larger lesson in several ways:
1. Students could explore research on lay definitions of intelligence in the U.S. and other countries (e.g., Lim, Plucker, & Im, 2002). This could introduce a discussion of varying conceptions of intelligence formulated by psychometricians and other experts, or cross-cultural comparisons of definitions of intelligence. Students can then be directed to the History of Intelligence Theory and Testing Web site, described below. Personal definitions of intelligence provided by prominent contemporary intelligence theorists are provided there.

2. Students could be encouraged to share some of the characteristics they listed when preparing their personal definitions in order to create a class construct of intelligence, which would be written on the board. This highlights the controversial nature of many of the items. For example, “creativity” is often included on the students’ lists, as well as less intuitive items like “kindness.” In addition, this activity provides opportunities to explain what a psychological construct is, and also to point out/draw out complexities, such as (a) each item on the construct is also a construct and (b) difficulties in defining and “measuring” each item written on the board. A ruler could be used as a prop to illustrate the difference between measuring the dimensions of a concrete and observable object (such as a desk in the classroom), and “measuring” the construct(s) on the board. This class discussion can take up to 2 hours of class time. In advanced classes, this discussion can follow from an introduction to the normal curve and a lecture about test norming. For homework, students can investigate differing definitions of human intelligence, and/or write a paper defending their personal definition.


**History of Intelligence Theory and Testing Web Site** ([http://www.indiana.edu/~intell](http://www.indiana.edu/~intell))

Objective: To provide teachers, researchers and students with an online “textbook” focusing on the history of intelligence theory and testing.

This Web site developed at Indiana University provides biographical profiles of individuals who have influenced the development of intelligence theory and testing, in-depth articles exploring current controversies related to human intelligence, and an interactive chronological map. Highlights of the site include videotaped interviews with prominent intelligence theorists discussing their influences, personal definitions of intelligence, and their most important contributions. The “Resources for Teachers” section includes several syllabi from intelligence courses taught by leaders in the field.


**Intelligence Treasure Hunt**

Objective: To introduce students to the scope of material available on the History of Intelligence Theory and Testing Web site ([http://www.indiana.edu/~intell](http://www.indiana.edu/~intell)). The following is a previously unpublished activity created by Jonna Kwiatkowsi of Mars Hill College:

Your mission today is to complete the following tasks with your team. The team that has the most correct tasks completed in time will be the winner. This website will be most useful to you in your quest: [http://www.indiana.edu/~intell/index.shtml](http://www.indiana.edu/~intell/index.shtml)

1. Burt was influenced by the cousin of the first person you need to identify.
2. What is the definition of intelligence offered by the person identified for question #1?
3. The above definition of intelligence is a “Hot Topic” for debate even today. In particular, a book based on the name of everyone’s favorite statistical distribution has received a lot of attention. What is the title and authors for this book? Why is the book controversial?
4. You know you’ve found the right book for question #3 if Stephen Jay Gould criticized it. What is the example SJ Gould uses to argue against genetics and IQ?
5. Question #1 includes the name of a very controversial researcher of intelligence. He influenced a lot of scientists, but why might they have been led astray in listening to him?
6. Another great controversial hot topic describes a graduate student who debunked the theories of his mentor and a character from question #1. Who was the graduate student, and what did he find?
7. Most of your scavenging has been related to two members of the Modern Foundations group. Who is the last member of this group and why is he important to psychology?
8. A famous 18th century composer is the focus of another hot issue. List the fallacies from this topic.

**Testing and Intelligence Video (2001)**

Objectives: To introduce students to some of the historical, cultural, and psychometric contexts of contemporary intelligence theory and testing.

This 25 minute video hosted by psychologist Philip Zimbardo explores the development of intelligence theory and testing, with emphasis on test bias and stereotype threat. It features interviews with
Using Online “Intelligence” Tests

Objective: To practice using test validation criteria.

Students can be asked to use what they have learned about intelligence theories and testing to critically evaluate the validity of online tests that purport to measure intelligence or IQ. This can be done at a very simplistic level for undergraduate students (who often believe that these are “real” intelligence tests) or at a more sophisticated level for advanced students who are learning about test validity. Online “intelligence” tests can be found easily by entering “IQ test” or “intelligence test” in any browser search engine. Students can be asked to discuss their conclusions in groups during class time, or to submit their responses in a formal paper.

Santrock’s (2003) Educational Psychology

Objective: To practice analyzing real-world contexts based on intelligence theories.

This resource suggests three possible activities. First, students can think of an activity they have participated in during the last 24 hours, and then analyze it in terms of Sternberg’s Triarchic Theory (1985) or Gardner’s Multiple Intelligence Theory (1983/2003). Second, students can observe an educational setting, and then analyze the types of intelligence that are valued in the classroom, emphasizing whether these values are explicit or implicit in the curriculum (several guiding questions are provided). Third, students can identify several of their own strengths and weaknesses as they relate to Gardner’s Multiple Intelligence theory.

A Survey of How Intelligence Testing is Taught in APA-Accredited Programs

Objective: To introduce college faculty to some typical processes and procedures for teaching courses on intelligence testing.

This article summarizes standard practices for teaching intelligence testing in APA accredited programs in school and clinical psychology. It discusses typical class requirements, instructional practices, and assessment strategies used by the university professors completing the survey. Most faculty members required students to practice administering the latest versions of the Wechsler and Stanford Binet scales. Many instructors also required students to observe others administering the exams, and conduct fabricated protocols during class time. Two-way mirrors and videotaping kits were reused for evaluation purposes. Course assessments included administering tests to practice subjects, writing reports, and taking examinations.

References

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Engaging Students in the Psychology of Language

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In the preface of his popular book, *The Language Instinct*, Steven Pinker wrote, “I have never met a person who is not interested in language” (Pinker, 1994, p. 7). At one level, this certainly seems to be true. People engage in animated conversations about whether women and men use language in the same way, whether one’s native language influences a person’s thought processes, and whether feral children would ever be able to acquire a language.

Nonetheless, as Pinker acknowledged, most readers of his book have probably thought very little about language in a systematic way. Considering how rapidly most of us acquired our native language (itself an interesting fact about language), and how long ago that was for most students, it is relatively easy for undergraduates to take language for granted. When students enter the first meeting of a class in personality or social psychology or child development, they likely come with some preexisting beliefs that may or may not match what they will learn in the class. When students come to the first session of their psychology of language class, they come with what, exactly? Perhaps they mainly have some curiosity about this relatively neglected topic.

Thus, one of the primary challenges for an instructor in a psychology of language (or psycholinguistics) course is to increase students’ awareness of language. Instructors should provide students opportunities to talk and think about language. One simple activity is to hand out a series of statements about language. For instance, students might discuss the following statements: “Whether or not a person’s speech is grammatically correct is not that important, as long as the person’s basic ideas are communicated;” “We rarely if ever remember the exact words a person uses; “Slips of the tongue reveal more about a speaker’s mind that the speaker may realize.” Often students will discover examples from their experience that are relevant to the statements. When different students retrieve examples that may lead to different conclusions, some engaging class discussions may emerge.

Another common challenge for teachers of the psychology of language class is the variety in students’ academic background. There will, of course, be psychology and linguistics students; however, it is not uncommon for many other majors to also be represented: English, sociology, anthropology, education, child development, human services or even an interested biologist. This wide variety in academic interests among students can be daunting for an instructor because students will drift to the aspects of the course most relevant to their training and be disengaged from other aspects of the course. Differences in academic background can also be an opportunity for a more engaging course. In class discussions students can be asked to relate their new knowledge and discuss its implications in their home discipline. These discussions can be insightful for both students and the instructor because of the novel perspective students may bring.

We next present a task that promotes student engagement in a psychology of language class with students representing multiple disciplines. In the final section of the chapter, we present an annotated bibliography of teaching activities that promotes engagement in the psychology of language.

**New Activity**

In this section, we propose a new activity that is designed to increase student engagement by allowing students a wide degree of control over their final project. Ideally students should be able to choose any topic relating to psycholinguistics and they should be allowed to format their project however they choose. Thus, it is possible that final projects may include a play about speech errors, an APA style paper about neurolinguistics, or a short story about the effects of alcohol and language. This activity will be discussed first as it relates to student engagement. Next we consider the specifics of the task and finally we share some rudimentary assessment guidelines.

**Background**

As previously mentioned, a psychology of language class is often an academically diverse course. Thus, one challenge for both instructors and students is the varied level of ability and comfort among the students for scientific writing. This challenge can impede an accurate assessment of
students’ understanding of the course knowledge if too much of the understanding is assessed via scientific writing. Similarly, even for many science students, writing a scholarly paper is a daunting task from which students derive little enjoyment and may reduce their engagement with the material. This assignment seeks to address these concerns on several different levels. By allowing students to choose their own topic, students can focus on an area of psycholinguistics that is interesting and relevant to them personally and academically. By allowing students wide latitude of freedom in how to express their knowledge about the topic, one overcomes a limitation of other disciplines that tend to think about writing in a very limited, narrow and discipline-specific way. For example, psychologists think about an APA style manuscript. Linguists think about MLA manuscripts. Poets think about poetry. Each writing style has its merit—and a plethora of information can be conveyed in any one of these formats. Our students, however, may be more adept at writing in one format over the other and they may not have yet developed the flexibility necessary to adequately convey their knowledge in multiple formats.

The current assignment offers students the ability to use their writing skills and creativity in an engaging way with the course material. Additionally, this project will allow students to approach the material in a new way that may offer new insights to both students and instructors. Finally, instructors must be willing to look at their course material in a new way; this project will increase student engagement but may also increase instructor engagement by offering new approaches to material highly familiar to the instructor.

**Task**

This activity is appropriate for an end of term project. When this project was implemented, topics were chosen near midterm, an annotated bibliography was due four weeks before the end of the term, and students peer reviewed the projects in class one week before the project was due.

Because of the nature of the assignment, the directions given to students were open ended and allowed students to focus on a topic in psychology of particular interest in a format of their own choosing. Consequently class time was devoted to discussing the final project and answering questions. Below are the guidelines that were given to students regarding was required for successful completion of the project.

A total of seven sources were required, one of which could be the course textbook, and two could be primary sources that were read and discussed in class. Students were told that sources should be briefly but clearly explained. The content of the source should also be clearly related to the main ideas and topics of the paper and fully integrated into the paper. Sources should also be properly cited in APA style.

In formats other than an APA scientific paper, students should still use information from sources and properly cite that information. For example, in a play or short story information from sources could be conveyed as expositional dialogue or prose that would then be cited using APA or MLA style. Thus, the informative content of the paper is written in a format that is consistent with the overall tone and style of the paper.

Directions indicated that the overall project should be informative. For instance, a good paper would include a depth of analysis that goes beyond reiterating course content. Specifically, sources should not simply be summarized but should show a degree of synthesis and integration into the overarching theme of the paper. The content should be presented in a way that demonstrates mastery of basic Psycholinguistic principles and make interesting (and novel) inferences, predictions and interpretations. Thus, the content should be fitting for an advanced level undergraduate course.

**Assessment**

Assessment should be divided into three subcategories. First, consideration should be given to the students’ use of sources. An excellent paper includes at least the required number of sources (seven) but should also briefly and clearly explain those sources while seamlessly integrating them into the paper. The sources should all seem to clearly point to the main idea that the author is attempting to convey and the sources should be properly cited. Second, the content of the project should be assessed. An excellent paper includes content that is unique to the project (not repeated from concepts in class). Additionally an excellent paper should do more than simply report the findings of sources—instead the material is considered, evaluated and extended (with novel predictions, interpretations or inferences). The material should be logically organized (or logically plotted). Overall, the project should demonstrate a high level of mastery of the material being discussed. Third, assessment should consider the quality of the writing. These projects should be enjoyable for the instructor and outsider readers to read. An excellent paper will have clear and concise writing that is free from typos and grammatical mistakes.

In summary, this assignment should enhance student engagement with material in a Psychology of Language course. Students should be allowed to interact with the course content that they are particularly interested in using a format they feel best captures their academic strengths. This assignment
allows students that are drawn to Psychology of Language from a variety of backgrounds (Psychology, Linguistics, Communicating Arts, Biology) to put their area of expertise to use in a novel way. Because Psychology of Language often attracts varied students, allowing students freedom to choose their medium for expressing themselves (research paper, short story, play, comic book, etc) will increase engagement in the class and with the material. Additionally, students will relate to the course material in a deep way: integrating their discipline specific knowledge with knowledge about the psychological mechanisms underlying language.

Annotated Bibliography

Demonstrating Patterns in Language
Reisberg (2010) presents some interesting questions, such as “Imagine that a hundred field mice are living in a farm house. Is the house mouse-infested or mice-infested?” The purpose of the questions is not to review the particular linguistic rules closely, but instead to convey to students that there are patterns in language. This demonstration might be a useful activity very early in the semester, and might help students begin to think about language and language patterns rather than taking them for granted.


Illustrating the Relationship Between Letters and Speech Sounds
Students often confuse letters of the alphabet with phonemes. An exercise (from Matlin, 2005, p. 314) to highlight the difference is to present students with words that contain the same letters but are pronounced in different ways, such as the “ea” in “beauty,” “create,” “bread,” “bear” and other words. Students can then be encouraged to find other words that have different spellings for the same phoneme, such as the /u/ in “beauty.”


Demonstrating Top-Down Processes in Language Perception
Here is a simple classroom demonstration that requires two student volunteers. One reads a text that includes misspelled words (e.g., “marrow” instead of “narrow”), and a second student shadows (repeats) the text. The rest of the class listens to hear if the shadower reproduces the text exactly (i.e., including errors) or restores the intended words. Typically, shadowers restore a number of words, and are unaware that they have done so. The activity demonstrates both top-down processes (i.e., guessing correct words based on context) and bottom-up processes (i.e., shadowers are less likely to restore words when the intended and mispronounced version differ in more than two features). This activity takes only a few minutes.


Illustrating Frequency Effects in Lexical Decision Tasks
A lexical decision task presents a string of letters on a visual screen and asks individuals to quickly decide whether the letter string is a word or not. Typically, the dependent variable is the time it takes for individuals to indicate their response. Readers make these decisions very rapidly. This effect can be modeled as a classroom activity by presenting individuals with lists of 20 letter strings. Individuals read the list and state aloud whether each string is a word. Both lists consist of a mix of words and nonwords, but one includes high frequency words (such as “effort” and “history”) whereas the other consists of low frequency words (such as “awry” and “cryptic”). Total response time is likely to be shorter for the high frequency list. The exercise can be modified to explore variables other than frequency that influence lexical decision time, such as lexical ambiguity.


Experiencing Ambiguity
Students find ambiguous sentences engaging, so presenting them with some examples can be both fun and educational. Reisberg (2010) presents examples such as “Grandmother of eight makes hole in one” and “Miners refuse to work after death,” which were taken from newspaper headlines. Instructors may be able to find examples of their own in other sources. Students can be encouraged to identify the multiple meanings of the ambiguous sentences as well as the type of ambiguity (lexical or structural).


Being a Conversational Pain
A somewhat chancy but interesting exercise (Robinson-Riegler & Robinson-Riegler, 2004, p. 423) that illustrates how conversational rules work is
to ask students to deliberately violate them. That is, deliberately say too much or not enough or fail to cooperate in some other way. Students should be careful to observe how their conversational violations affect their conversational partners. This exercise may effectively illustrate how we tacitly follow various conversational maxims.


**Advancing Student Understanding of the Evolution of Language**

One way to increase student interest in the evolution of language is by discussing the concept of a “protolanguage”—that is, a single language from which all other spoken languages might have evolved. Instructors might begin by discussing how some words may be similar across many different languages. Additionally, students can explore this concept by looking at the following website: http://www.exploratorium.edu/exploring/language/related_languages.html, which examines questions such as where languages come from and how languages differ in their expression of numbers:


**Demonstrating psycholinguistic concepts**

Langston reviews software that illustrates psycholinguistic principles, including reaction time to identify words in discourse, reading time to sentences, and false recognition of sentences.

For example, when testing reading time to sentences, the time to read a sentence depends upon its relatedness to previous sentences. Langston shows that the demonstration results mirror those of the original study, and that students rated the programs favorably. These demonstrations may assist instructors in engaging students in psycholinguistics by requiring them to actively learn the concepts.


**Using the Web to Promote Active Learning and Critical Thinking**

This article demonstrates the value of Web-based assignments in demonstrating psycholinguistic concepts. Students complete five assignments on a variety of psycholinguistic topics (e.g., American Sign Language, categorical perception, lexical networks). For each assignment, students compare the information on the Web with the material in the text. Web-based assignments can engage students actively while also helping students evaluate the accuracy of information on the Web.


**Reference**

# Section 3. Biological Processes, Research and the History of Psychology

*Bryan K. Saville, Editor*

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Online Teaching Resources for Animal Behavior

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The study of animal behavior has a long history in psychology (e.g., Watson, 1910). Nonhuman behavior can provide insights into many human behaviors, as humans also have many instinctive responses (Lorenz, 1981; Tinbergen, 1951). I therefore use examples of nonhuman behavior to illuminate human behavior. I believe that students find the parallels between nonhumans and humans entertaining, and at the same time edifying. For example, talking about parenting in humans and nonhumans (e.g. Altmann, 1980) illustrates the similarities and differences across phyla. Thus I think that a course in animal behavior can be an integral part of the psychology curriculum.

Introduction, Research Methods

I feel that the best way to start a course in animal behavior is with the idea of evolution. I find that the best introduction to the idea of evolution comes in two parts. The first part is a general introduction to how evolution may construct new species. To demonstrate this, I discuss the evolution of ring species. These are species that at their geographic borders can interbreed with each other, but as they get further away from the edges, the species can no longer interbreed. I typically discuss Ensatina salamanders, which live in the California coastal range and in the Sierra Nevada range of mountains around the California Central Valley. These salamanders can interbreed with the species to which they are geographically closest, except for those at the far southern end of their range. In that area, the two species are quite different. This is explained well in the following video: http://www.youtube.com/watch?v=PjcFSy1KCTI

I next discuss the research methods that psychologists use to investigate animal behavior. I talk about the difference between psychologists and ethologists and the seminal work of Konrad Lorenz (e.g., 1981) and Niko Tinbergen (e.g., 1951) in the study of instinct. I discuss Lorenz’s work on imprinting in waterfowl and mention that he substituted himself for the mother duck in these studies. I then show the following video: http://www.youtube.com/watch?v=2UIU9XHmUI&feature=related

I also discuss the importance of developing a list of an organism’s typical behaviors; a list ethologists typically call an ethogram, along with aspects of such behaviors that are invariably part of the ethogram. The following laboratory exercise from the Animal Behavior Society Web site gives students information on how to develop an ethogram: http://www.animalbehavior.org/ABSEducation/laboratory-exercises-in-animal-behavior/laboratory-exercises-in-animal-behavior-ethograms.

Genes and Behavior

Second, it is also important to talk about genetics, a topic about which students in my course often have different levels of understanding. Thus, I find it necessary to begin at the structure of DNA and then cover transcription and translation and the construction of proteins. I then discuss how proteins make up everything in the human body. It is important that students understand that when authors talk about a gene for a particular behavior, the authors are using a “shorthand” method of reference. I emphasize that genes simply code for proteins. These proteins then combine into tissues and organs and organ systems. To clarify this, I show a brief video on transcription of DNA into messenger RNA: http://www.youtube.com/watch?v=cD9t8c3BUCY. I then show another brief video (http://www.youtube.com/watch?v=6Rrymt6XwI) that discusses the translation of messenger RNA into proteins. I finish with a video that integrates both halves of the process to give an overview of the process: http://www.youtube.com/watch?v=OEWOZS_JTgk

To reinforce the connection between genetics and behavior, I show the following video of a teenage girl with Tourette’s syndrome. Though somewhat lengthy (about 18 minutes) and often graphic, it clearly demonstrates the interaction of the effects of environment and genes on behavior: http://video.au.msn.com/watch/video/tourettes-out-of-control/xa2sgkl

I also explain how humans (and other species) are continually evolving. I focus specifically on the
phenomena of lactose tolerance and intolerance. I show students a map of areas in the world where lactose tolerance exists. I talk about the development of tolerance in light of the facts that agriculture began fewer than 15,000 years ago and that keeping domestic animals, including those that produce milk, is a relatively recent innovation in human history. The following entry from Wikipedia shows the map I use to display the development of lactose tolerance: http://en.wikipedia.org/wiki/Lactose_intolerance.

Development

Next, I discuss the development of organisms. A large part of my lectures on this topic deals with critical periods in the development of organisms. I reference the Konrad Lorenz video that I showed earlier in the course and talk about critical periods in the development of organ systems, especially in humans and other mammals. To illustrate I show this short video about the development of vision in humans: http://www.psychbytes.com/Flash/Critical%20Periods%20Video/critical%20periods.htm.

Learning

I briefly cover learning and its relevance to evolution. I explain how learning helps organisms adapt to environmental changes that occur over a shorter time span than evolutionary history. To reinforce the notion of short-term adaption, I discuss Pavlovian learning and show the following video of Ivan Pavlov: http://www.youtube.com/watch?v=hhqumfpxuzI

I also discuss the development of phobias and other sorts of behaviors that may provide an evolutionary advantage. I show the following video in which John B. Watson and Rosalie Rayner (1920) attempted to instill in Little Albert a fear of furry things. I use this example because most students have heard of Watson and Rayner’s work with Little Albert, although they typically have little knowledge of the experimental paradigm that Watson and Rayner used. http://www.youtube.com/watch?v=Xt0ucxOrPQE&feature=related.

Cognition

I talk about Tinbergen’s (1972) work on cognitive mapping in wasps, which demonstrates that organisms use the environment to find necessary resources. The following video demonstrates the idea of cognitive maps: http://www.youtube.com/watch?v=SBTP7W5c3c8

Foraging

Foraging is an important part of any organism’s life. To demonstrate the various ways in which organisms collect and process food, the following exercise from the Animal Behavior Society Web site gives students a chance to observe the process in squirrels: http://www.animalbehavior.org/ABSEducation/laboratory-exercises-in-animal-behavior/laboratory-exercises-in-animal-behavior-squirrels-and-food-selection.

Predation and Predator Avoidance

A large part of foraging consists of preying on other organisms or avoiding being preyed on by other organisms. There are many ways organisms accomplish both of these tasks. When discussing these topics, I first talk about avoiding predation. Often one of the best ways to avoid predation is to look like a dangerous organism. I therefore talk about both Batesian and Müllerian mimicry, using a personally developed PowerPoint slideshow that shows similarities between the Monarch butterfly, the Viceroy butterfly, and the Queen butterfly (http://www.psychbytes.com/Audio%20PowerPoints/mimicry.ppt). Of these three butterflies, only the Viceroy is palatable; the other two are poisonous. Therefore, the Viceroy exhibits Batesian mimicry with both the Monarch and the Queen butterfly. Because Monarch and Queen butterflies are poisonous, they exhibit Müllerian mimicry with respect to each other. It is important to note that in the case of Batesian mimicry, the mimic must be less common than the model, because if the mimic becomes more common, the mimicry will no longer deter predators.

I also present the various behaviors of the hognose snake. The snake is an excellent example of an organism that uses many different escape behaviors. For example, it hisses and vibrates its tail as if it were a rattlesnake. The snake also flattens its upper body to mimic a cobra-like animal and narrows its neck right behind its head to give it the appearance of a viper. The following video shows these behaviors: http://www.youtube.com/watch?v=5Z6P35xJPvg&feature=fvw. If these techniques do not work for the snake, it then tries to play dead by turning over on its back and opening its mouth and sticking out its tongue. If one tries to turn the snake right side up when it has done this, it will immediately turn itself upside down again. These latter behaviors are well demonstrated in the following video: http://www.youtube.com/watch?v=7nScxF8vGw0
This death-feigning behavior is different from the tonic immobility that is exhibited by the Virginia Opossum. When the opossum is prodded, it makes no move and, in fact, exhibits what appears to be a rigor mortis state. This is displayed in the following video: http://www.youtube.com/watch?v=NCW9CrqD48

Of course, other mechanisms for avoiding predation abound. There are several caterpillars, for example, that mimic a snake with their thoracic segment. I have included two different videos of two different caterpillars engaging in this behavior: http://www.youtube.com/watch?v=uQhWDBzlLCM and http://www.youtube.com/watch?v=L1oFJb3JuO0&NR=1&feature=fvwp

Many animals also engage in aggressive mimicry. This is mimicry that is designed to increase the ability of the organism to capture prey. The example I discuss is of an anglerfish that uses part of its body to mimic a food that its prey eats. This is demonstrated in the following video: http://www.arkive.org/anglerfish/lophius-piscatorius/video-08.html.

Courtship

Most students are quite interested in the different courtship displays that organisms use. I therefore show several different videos on aspects of courtship behavior. I start with a video of ringneck doves courting, which many of my students have seen before: http://www.youtube.com/watch?v=svf45BuTf6. I then discuss less common courtship behaviors such as that of the stickleback fish. In this fish, the male builds the nest and gives parental care to the offspring. The following video shows a male displaying for a female, enticing her to go through his nest and deposit her eggs. He then follows the female through the nest and releases sperm to fertilize the eggs, staying guard until the eggs hatch: http://www.arkive.org/three-spinedstickleback/gasterosteus-aculeatus-aculeatus/video-ac09b.html.

Many bird species use courtship feeding as part of their courtship ritual. In courtship feeling, male birds feed female birds, which gives the females an opportunity to gauge how well the male could provide for the nestlings. The example below is of Kingfisher courtship feeding: http://www.youtube.com/watch?v=WkHX9p7vWnA&feature=related. I use this video to emphasize that it is not always the female who ends up caring for the offspring. I also emphasize that there are many different ways to care for offspring. To reinforce this idea, I show the following video, which features mouth brooding in cichlid fishes: http://www.youtube.com/watch?v=bchZjZrmPJY.

Migration

I finish the course talking about proximal and distal cues for migration. I also discuss the great migrations of the world. Because my university is located in the central flyway (the major migratory path for birds in the central part of North America), I take my students to observe the spring migration of sandhill cranes through the Platte River Valley. I also show them a video of a monarch migration through North America to Mexico (http://www.youtube.com/watch?v=FPIQK9rm14) and a video of the wildebeest migration across the Serengeti in Africa (http://www.youtube.com/watch?v=Hyvx1UpEjgI).
These three migrations are arguably three of the most impressive migrations in the world.

**Conclusion**

I find that my course is improved immeasurably by giving students an opportunity to observe animals in their natural habitat, even if they observe the animals via video. Students report that they have a better, more complete understanding of the course concepts. I hope these resources give readers a good starting point for their own courses on animal behavior.

**References**


Activities for a Neuroscience Course

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In our experience, many psychology students resist neuroscience-oriented courses. Some students fear that they will not perform well in a course that incorporates material from the natural sciences. Others fail to see the relevance of such a course, especially because their career aspirations are geared toward an applied area of psychology. The self-fulfilling prophecy that ensues is all too familiar to psychology instructors, regardless of the subdiscipline or level of students they teach. Our approach to engaging students in neuroscience courses is twofold. First, we know that active, conceptually oriented involvement is key to learning. We also understand, however, that students need to learn specific content and that this needs to be emphasized, integrated, and made explicitly relevant to students. In the paragraphs that follow, we provide an annotated bibliography of several activities that provide integrative, hands-on learning experiences in the classroom or the classroom laboratory. In addition, we discuss two novel approaches to actively engaging students in a neuroscience course: (a) a set of out-of-class exercises, in-class discussions, and a neuroanatomy laboratory adaptable to any neuroscience course; and (b) a novel, process-oriented, neuropsychopharmacology experimental design appropriate for a laboratory neuroscience course.

1. A set of 10 exercises for classroom engagement, developed as an Instructional Resource for the Society for the Teaching of Psychology, which is located at: http://teachpsych.org/otrp/resources/lloyd08physio.pdf

   The first exercise is an expandable, guided neuroanatomy tutorial, which reinforces a structure-function and systems approach to learning brain anatomy using sheep brain dissection and histologically stained microscopic tissue sections. For this (and every) exercise, we provide student instructions and instructor answer keys. The neuroanatomy lab prompts student engagement and understanding through a question-answer format. For example, instead of simply asking students to locate and memorize the name of the infundibulum, they must locate it; describe its connection to the hypothalamus and the pituitary gland; report a few major neuro-endocrine hormones released through this system along with their systemic functions; and describe the function of the vascular plexus that surrounds these structures, which are readily observable during dissection. The addition of case studies and other pedagogical tools reinforces structure-function relations, actively engages students, and highlights the importance and relevance of the content and approach. Importantly, concepts that are discussed in further detail throughout a typical semester course are emphasized.

   The remaining exercises take a conceptual approach to learning difficult core material. For example, students develop a written explanation of the pharmacokinetics and pharmacodynamics of alcohol on the CNS, but only after learning the neurophysiology of the action potential as well as the organization and function of the major neurotransmitters and neurotransmitter receptors. Students must describe why alcohol is a CNS depressant and why it produces dose-dependent biphasic effects. The written assignments serve several functions: They allow students to apply the information they are learning to topics that are interesting and relevant to them, but they also provide ample opportunity for classroom discussion of these and related (and sometimes non-related) topics. Some of the topics addressed through these exercises include:

   a) Neurophysiology and mechanisms of action of common neurotoxins
   b) Neurophysiology and neuropharmacology of alcohol and other CNS depressants
   c) Developmental neuroendocrinology, sexual dimorphism, and sexual orientation
   d) Adult neurogenesis and homeostatic functions
   e) Visual perception and visual agnosias
   f) Learning theory, plasticity, and substance abuse
   g) Mirror neurons, social learning, theory of mind and autism

2. A novel neuropsychopharmacology laboratory exercise modeling the actions of over-the-counter...
supplements or drugs on the CNS, which is located at: http://northgeorgia.edu/STPebook.

We have developed a novel, active-learning laboratory experience in an underrepresented area of investigation, neuropsychopharmacology, intended for undergraduate upper- and lower-division psychology courses. This exercise incorporates an engaging, process-oriented approach to the instruction of the scientific method without the use of animal models or scheduled compounds commonly used in neuropsychopharmacology. Furthermore, this exercise focuses on in vitro models as a viable alternative to in vivo studies. Participants test the effects of an over-the-counter drug or dietary supplement on a microglia cell line. They measure rates of phagocytosis, cell morphology, and cellular proliferation as functional readouts for drug-induced changes. Over two or three laboratory sessions, students in small, collaborative groups engage in the following: (a) develop a novel hypothesis and experimental design; (b) collect and analyze primary data; (c) develop scientific and APA-style writing skills; and (d) learn key neurophysiology, neuropathology, and neuroimmunology concepts and techniques. Background information, protocols and possible student assignments can be obtained at: http://northgeorgia.edu/STPebook.

Annotated Bibliography

Glial Response to Neurotrauma

Barnes and colleagues describe a 5-week laboratory experience involving student-developed hypotheses to test the effects of experimental ablation on astrocyte activity in the rat brain. Several weeks focus on the instruction and development of the surgeries, histology, and subsequent image analysis. The instructor served as an “expert consultant” through the process, allowing students to develop hands-on, problem-solving, and critical-thinking skills. Students learned how to perform experimental ablations, tissue fixation and processing, cryostat tissue sectioning, histological staining, and computerized image analysis; they also performed statistical analyses and interpreted the data. Pretest-posttest scores revealed a significant impact of the course on student-learning outcomes. This activity provides a valuable set of experiences for a semester-long laboratory course because there are many opportunities for hands-on learning.


Gustation + Olfaction = Flavor.

Beins describes an activity that demonstrates the combination of two or more senses to distinguish stimuli, in this case gustation and olfaction. Discerning a single stimulus often requires multiple senses. In these situations, multiple sensory signals combine to create one single perception (e.g., flavor). In this experiment, students who were blindfolded ate jellybeans and guessed the flavor. Some students also smelled the jellybean before eating it. Students who had olfactory cues outperformed students who relied solely on gustatory cues. This experiment highlights the importance of combined gustatory and olfactory sensory information in the formation of a new sense (i.e., flavor) using a simple design suitable for an in-class demonstration.


Quantification of Serotonergic Cells in the Raphe Nucleus.

This activity utilizes inquiry-based instruction, which is described as student designed and driven, but does not have a prescribed outcome. Students received a set of immunohistochemically stained slides with sections through the dorsal raphe nucleus of the gerbil brain. The students estimated the number of serotonergic cells in this nucleus by developing their own counting technique. The activity includes instruction of microscopy and immunohistochemistry as well as microscopy tutorials and activities. The author provides several suggestions for how to expand or apply this activity in various ways (e.g., making it a semester-long activity in which students prepare the slides and apply the technique to answer an experimental question). This activity demonstrates a particularly creative way to stimulate critical thinking, especially in the context of primary literature involving cell counting.


Motor Programs and their Circuitry

Instruction on the control of movement is complicated by the complex interactions of the cerebral cortex with the central pattern generator.
Buford proposes a demonstration involving a task to consume spare attention while also monitoring performance on a concurrent motor task. Performance on a math task declines when cerebral cortical attention networks are taxed by cortical motor demands. Participants performed a simple math quiz while sitting, walking, or navigating a simple obstacle course while walking. Participants who were sitting or walking performed similarly on the math quiz. But participants who navigated an obstacle course made more errors. This activity demonstrates the lack of involvement of the cerebral cortex in normal, over ground walking, but highlights its involvement when visual control of foot placement is required. Posttesting showed that participants and classmates retained these concepts for up to 14 months. This is a simple experiment to demonstrate complex control of motor programs and the limited circumstances by which it involves the cortex, especially when coupled with instruction on motor programs and the central pattern generator.


**Sexual Dimorphism in the Olfactory System**

This activity provides a good demonstration of sexual dimorphism in the olfactory system. It requires a few fashion magazines that have perfume ads containing small amounts of perfume or perfume samples that comprise a panel of about 20 different fragrances (both perfume and cologne) with numbered codings. Participants identified each fragrance. Average accuracy for men was 30-40%, whereas the average accuracy for women was 50-60%. Consistently, women performed better in both olfactory sensitivity and discrimination ability, which may generate a discussion about anatomical differences between men and women (dimorphism), theoretical reasons for these differences, and the practical implications. This activity uses a very simple design suitable for an introductory course in-class demonstration. This activity also demonstrates that olfaction is one of the weaker senses.


**Plasticity and the Somatosensory Cortex**

In this activity, Chute and Schatz demonstrate the probabilistic nature of neural networks in the context of learning, neural plasticity, and rehabilitation. The authors used a stylus to touch the second, third, and fourth toes of a blindfolded participant’s bare foot. The participant reported which digit was touched. The activity can proceed in a number of ways allowing students to collect various types of data. The use of an independent-samples design demonstrates improved accuracy when the stimulus is applied to the digits of the hand instead of the foot. The use of a repeated-measures design exemplified how participants’ accuracy improved with training and declines as time passes without training. The various experiments demonstrated principles of somatosensory organization and plasticity resulting from experience, especially in respect to rehabilitation. This simple activity necessitates few resources but is capable of demonstrating complex neural phenomena. Another merit of this activity is its ability to expand to fit the particular pedagogical needs and levels of a particular course.


**Gustatory Morphology and Individual Differences**

This activity provides a visual demonstration of fungiform papillae on the tongue using food coloring, a flashlight, and a magnifying glass to distinguish between filliform (i.e., stained; no taste function) and fungiform (i.e., non-stained; contain taste pores) papillae. The activity also allows students to correlate fungiform papillae density (i.e., taste pore density) with individual differences and individual taste differences using a 6-n-propylthiouacil (PROP) assay to identify “supertasters,” “tasters,” and “nontasters.” This activity focuses on gustatory transduction, gustatory anatomy, and anatomical variations among people using a cost-effective and simple, yet effective design. This be would a suitable experience for an introductory class discussing sensation and perception.

**Memory for Affective Stimuli.**

Flint describes three studies designed to uncover the connection between emotional arousal and circulating glucose levels in relation to recall, hypermnesia, and reminiscence memories. These studies use varying emotionally arousing stimuli (words or pictures). The first study involved affectively rated words with three subsequent free recall tests to measure hypermnesia in relation to emotional arousal (and suspected glucose release). The second used affectively rated pictures with concomitant blood glucose sampling using a glucometer to measure more directly the relation between recall and glucose levels. The third involved the use of beverages of varying glucose levels to measure recall of affectively rated pictures. Collectively, these studies provide a simple demonstration of the importance of the valence of stimuli and their relation to memory with implications for both the advantages and disadvantages (e.g., psychopathology) that might result. Importantly, this activity also necessitates an underlying discussion of the neural mechanisms of memory formation. Given the breadth of this exercise, it is adaptable to numerous classes and class levels in institutions with varying facilities.


**A Structure-Function Approach to Memory Development**

This activity uses a rodent non-match-to-sample assay to assess rat pup performance on a working/spatial memory task known to involve the hippocampus. The ability to perform this task typically develops in rats by postnatal Day 18. The authors provide instructions for how to construct and use the necessary Y-maze and how to run this behavioral paradigm. Eighteen-day-old pups but not 15-day-old pups acquired the alternation habit (NMTS behavior). Several discussion questions prompt students to explore the structural, functional and developmental components of the behavior. This activity provides students the opportunity to use a behavioral assay to test complex neural structure and function in a developmental context and is particularly relevant to an upper-level neuroscience, development, behavior or learning course.


**Sexual Dimorphism in the Spinal Cord and Androgrens**

This activity investigates the organizational effects of androgens on the development of sexually dimorphic nuclei in the spinal cord using image analysis. The spinal nucleus bulbocavernosus (SNB) innervates the muscles of the penis, which are absent or vestigial in adult females. The SNB is larger in adult males than adult females. The retrodorsal lateral nucleus (RDLN) innervates the flexor digitorm brevis muscle and is not as dramatically sexually dimorphic. This activity uses digitized micrographs of spinal cord segments through the RDLN and SNB of adult male and female rats, some of which were treated developmentally with Flutamide, an antiandrogen. Students counted the number and size of neurons in each nucleus in each condition using blinded analysis. Statistical analysis revealed an effect of Flutamide on male rats, but only in the SNB. There was also a gender effect on the SNB and RDLN of control animals. This is a self-contained activity. The authors provide all digitized images needed as supplements as well as instructions for how to perform image analysis using the free NIH Image J software. This is an excellent activity to demonstrate the use of image analysis in an experimental design.


**A Primer on Functional Brain Imaging**

This activity involves students in functional magnetic resonance imaging (fMRI) analysis. It requires access to primary fMRI data sets, preferably through an arrangement with a local medical center and ideally through a collaboration that would allow students to observe the data collection. In the event that primary data are not available, the authors report hyperlinks for free datasets compatible with various software packages. A preassignment overview is available for instructors as PowerPoint slides available through a hyperlink, and the authors discuss several key issues concerning the acquisition and use of freeware for fMRI analyses. Key to the exercise is the opportunity for instruction on the development of activation maps produced during fMRI post processing. The activity culminates in an APA-format report and is suitable for an upper-level course on neuropsychophysiology or cognitive neuroscience.

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Learning Neuroanatomy Using the Allen Brain Atlas

The Allen Brain Atlas is a free, on-line tool that functions as an atlas, a gene expression map, and a 3-D model of the mouse brain. This activity details a self-guided tutorial meant to supplement the Allen Brain Atlas and to teach neuroanatomy and structure/function concepts. The tutorial guides the user through several exercises that require active use of the Atlas, including constructing an image and a 3-D model using the Allen Brain Explorer; retrieving gene expression data to reinforce anatomical and functional concepts; and a closer look at several key brain areas such as the olfactory system, the limbic system, and the hypothalamus. This activity is a work in progress with pleas for it to be collaboratively expanded. Although extremely valuable in its own right, expansion of this free resource will serve to enhance further neuroanatomy educational experiences. This activity adapts to any class that teaches neuroanatomy, particularly for institutions that cannot implement brain dissection laboratories.


The Evolution of the Action Potential

This experiment gives students the opportunity to witness and measure the electrophysiological properties of an action potential in the Chara giant alga. Using intracellular recording and mechanical stimulation, the sustained and large amplitude action potentials from the large Chara cells demonstrated the properties of the resting membrane and action potentials and the likely ions involved. This lab stresses Nernst calculations and waveform analysis. This activity also promotes a discussion of the evolution of the nervous system in general and ion channels specifically, but it provides a more technically simple means of performing electrophysiological measurements than if using animal cells. It also reinforces difficult concepts related to neuronal excitability. It is suitable for an upper-level course in neuroscience or neurophysiology.


Social Neuroscience and Cortisol

In this activity, Kalman and Grahn use an enzyme immunoassay to detect salivary cortisol levels. Cortisol is released from the adrenal cortex in response to stress, which is regulated upstream by hypothalamic corticotrophin hormone release. Thus, circulating cortisol levels are indicative of a neuroendocrine response, which is sensitive to environmental perturbations. This resource proposes numerous between-groups and within-groups studies demonstrating natural or stress-induced variations in salivary cortisol (e.g., circadian rhythms, exercise, sociability, and risk-taking behaviors) and provides a simple psychophysiological approach to understanding social neuroscience. It also provides a forum for discussion of correlative vs. causative analyses and other oft-debated topics in behavioral neuroendocrinology. This activity is suitable for a mid- to upper-level course in neuroscience, endocrinology, behavioral neuroscience, or social neuroscience.


Prism Goggles and Visuo-Motor Plasticity

Neural plasticity is an important concept in neuroscience, yet it is difficult to model in a classroom environment. This activity is simple, inexpensive, and runs well within the constraints of the typical classroom. The authors describe how to construct prism goggles that laterally shift the visual field along with a set of exercises that test cerebellar-dependent visuo-motor coordination. Student testing occurred at baseline (no goggles), during preadaptation (goggles on, but training not yet performed), after adaptation (goggles on and training performed), and post adaptation (adaptation complete with goggles on, but tasks now performed with goggles off). Coding of the performance of participants on graph paper during an open-loop pointing task allows for the quantification of the degree and direction of visuo-motor errors. The authors suggest the use of additional conditions to show the importance of active versus passive training on visuo-motor adaptation while wearing goggles.

This demonstration allows the instructor to teach students about neuroplasticity in a relatively short period of time. A number of thought questions for students to ponder encourage further student engagement.


**Neuroscience Course Supplements**

This resource contains a set of 10 exercises meant to supplement a traditional neuroscience course. The first activity includes a structured set of sheep brain dissection labs designed to provide a structure/function approach to neuroanatomy, covering sections in the coronal and sagittal planes as well as special dissections and microscopic anatomy. An interactive set of lab questions and an instructor key are included for each as well as basic information about how to construct the neuroanatomy labs, what materials are needed, and where to purchase them. The remaining exercises, distributed to students as supplemental assignments, cover a range of topics including neurophysiology, drug addiction, sexual orientation, adult neurogenesis, and prosopagnosia. An instructor key comes with each assignment. This set of activities, in part or in full, is appropriate for an upper-level course as a supplement to lecture material.


**Simple Neural Network Demonstrations**

Discussions of neural networks are underrepresented in the undergraduate curriculum, despite the importance of understanding algorithmic analyses in determining the output of neural circuitry. The major goal of this set of activities is to explain how complex processes (outputs) can emerge (i.e., the whole is greater than the sum of the parts) from the interaction of simple elements (inputs). The authors describe three demonstrations whereby participants must tap a neighboring person and raise a sign if they are tapped on the shoulder. Thus, through a simple, three-person circuit, an emergent “inclusive-or” or “and” network is demonstrated. The addition of more participants with expanded instructions (e.g., if you are tapped and not if you have a hand resting on your shoulder, tap the person in front of you and hold your hand on the shoulder of the person diagonal to you) yields the opportunity to demonstrate inhibitory connections and “hidden” layers to produce “exclusive-or” networks. The authors provide additional background information pertaining to the non-linear outputs of neuronal interactions. This activity is suitable for an upper-level cognitive neuroscience or neuroscience course and provides a theoretical viewpoint to supplement commonly used texts, which often neglect these important concepts.


**Learning Neuroscience One Case at a Time**

In this article, Meil details three exercises that teachers can use to incorporate case studies in a neuroscience course. Exercise 1 requires a literature review of the salient features of the case study and the development of a hypothetical experiment to test a novel question concerning the condition. Exercise 2 entails a supervised case study of a patient with a brain disorder. Exercise 3 requires students to evaluate an existing interpretation of a case study or treatment strategy on the condition of interest. The article contains a chart detailing many classic case studies, which are useful as a starting point for discussion or as a stand-alone resource. Finally, the author highlights the advantages and disadvantages of the case-study approach as well as the value of its incorporation. The nature of these exercises allows teachers to incorporate them into a number of courses in neuroscience, including those dealing with psychopathology themes.


**Environmental Enrichment, Neural Plasticity, and Neurogenesis in Crayfish**

This activity uses fluorescent immunohistochemistry directed at a synthetic S-phase marker (BrdU) and confocal microscopy to analyze adult neurogenesis in the brains of adult crayfish as a function of environmental enrichment. Students performed all aspects of the experimental design from which they demonstrated that an enriched environment results in increased neurogenesis in cluster 10 of the crayfish brain. Participants gain experience in brain tissue processing, immunohistochemistry, and confocal microscopy as well as image and statistical analyses. This activity
also provides an opportunity to instruct on the practical and theoretical importance of adult neurogenesis, which is a key concept in neuroscience.


**Learning Neuropsychopharmacology Through the use of Behavioral Techniques and Animal Modeling**

This activity uses a rodent model and behavioral neuroscience assays to assess the effects of social isolation or an enriched environment on anxiety and drug-induced sensitivity. The authors operationalized anxiety through the use of an elevated plus maze and an open field chamber. Using animals with or without amphetamine exposure, they assessed the amount of time spent in the open arms (elevated plus maze) or near the center of the chamber (i.e., thigmotaxis in the open field chamber) by animals reared singly or in an enriched environment. Students performed a prelab reading, ran the behavioral tests, collected and analyzed data, and wrote a formal report. The authors also describe how to build the behavioral testing apparatuses. The authors note several targeted outcomes including the development of an understanding of psychostimulants’ mechanism of action, conceptual and operational definitions of thigmotaxis, the use of animal models, the ability to perform statistical analysis, and provide graphic displays of the data. This is a thorough activity, which runs students through the entire process of experimentation. It provides an ability to tailor the activity to the level of students as well as the ability to expand the involvement of students.


**Using Neurovascular Unit Measurements to Teach Neuroscience.**

The neurovascular unit consists of several associated cell types including neurons, endothelial cells, astrocytes, and pericytes, which are affected by both exogenous and endogenous factors. In addition, the neurovascular unit regulates the function of the neuron, which is dependent on the delivery of oxygen and glucose from the blood. Thus, the neurovascular unit is an important anatomical construct that is implicated in numerous brain disorders, yet is underrepresented as a topic of instruction in undergraduate courses. The authors present several methodologies for visualizing the cerebral vasculature using unstained, Nissl-stained, DAB-stained, or immunocytochemically-stained brain tissue. Each method falls on a spectrum according to the amount of student involvement required, the facilities and resources needed, and the cost of performing such techniques as well as the value of the data collected. The authors present an additional activity involving searching for vascular markers on a free database of digitized images (GENESAT). The authors do not propose student projects in this resource, but the techniques they present are easily adapted to an experimental design (e.g., determining how environmental change can influence the neurovascular unit). In addition, these techniques provide expanded instruction opportunities focused on in vivo neurophysiology as well as techniques commonly used in the neuroscience lab.


**Observing and Measuring Biological Rhythms**

This activity focuses on circadian rhythms produced in the CNS, which affect the way the body works on a daily basis. The authors present an activity involving a simple means of observing biological rhythms (i.e., performing systematic body temperature measurements). For 3 days, students measured and recorded their body temperature during waking hours (i.e., every 2 hours). The students observed a daily change of about 1-2 degrees Fahrenheit in normal body temperature. Additionally, students observed that the temperature change followed a daily pattern. For most people, body temperature is lowest in the early morning upon waking and highest during the evening. This activity provides a simple method for demonstrating biological rhythms and the importance of systematic data collection and graphing. This activity is appropriate for an introductory class to demonstrate neuroendocrinology and scientific methodology.

- Renner, M. J. (1999). Circadian rhythms and body temperature. In L. Benjamin, B. Nodine, R. Ernst, & C. Broeker (Eds.), Activities handbook for the teaching of psychology (Vol. 4, pp. 109-
Gustatory Perception Involves Receptor Interactions and Other Signaling Mechanisms

This activity uses a simple pretest-posttest design to illustrate the importance of ligand-gated receptors for gustatory transduction. Students sampled salt, aspartame, sugar, M&Ms®, and Sweetarts® before and after ingesting a tea brewed from the leaves of the Indian herb Gymnema sylvestre (sold in health food stores), which binds to and blocks the sweet receptors for 30-60 mins. Participants described their subjective taste experience for each substance in relation to four primary tastes (sweet, sour, salt, and bitter). This activity highlights the importance of taste receptor mechanisms and interactions by demonstrating the taste of substances in the absence of a functional key receptor mechanism. Additional instruction opportunities arise from a realization that aspartame perception is not as dramatically altered as students might predict, hence allowing for a discussion of additional signaling mechanisms used in gustatory transduction. The key aspect of this activity comes from its ability to engage the students in a subjective reflection of their own sensory experience.


Using Movies to Teach Neuroscience

This resource provides several examples of full-length movies that teachers can successfully incorporate into a neuroscience course. The article includes a thorough list of approximately 100 movies along with complete references, movie duration, specific neuroscience content covered, rating, reason for rating, and other useful information. It also includes several sample assignments and exercises to highlight the use of specific movies, film series, and film clips to supplement courses that cover neuroscience material. It is a useful resource for any class that involves neuroscience-related content.


References


Physiological Psychology

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This chapter provides class and laboratory activities related to the teaching of physiological psychology. Physiological psychology can be challenging for students due to the amount of unfamiliar material related to brain anatomy and physiology. One way to foster student learning in this area is to demonstrate terminology and concepts using engaged activities. This chapter summarizes several effective strategies that instructors can use.

The activities presented here are divided into three areas: nerve cell communication, brain structure and function, and behavioral pharmacology. A final section provides instructors with a creative game to prepare for a final exam in physiological psychology. Although the exercises most closely align with the material in a physiological psychology course, instructors should envision ways to apply them in introductory psychology, sensation and perception, developmental psychology, human neuropsychology, and psychopharmacology courses.

Sheep Brain Dissection in a Physiological Psychology Laboratory Course (Unpublished Class Activity)

Dissection of a preserved sheep brain can aid student learning of neuroanatomical structures and functions. In the laboratory section of physiological psychology, students investigate a sheep brain using a dissection guide from Carolina Biological Supply Company (Burlington, NC). The instructor guides them through the dissection by performing all the required steps. This is a critical component of the lab as students generally value observing the procedures first before being asked to work individually. Each student receives his or her own sheep brain and must complete the dissection steps in 1 hour. Students normally accomplish this task quite easily, and they generally have additional time to rehearse the listed brain regions and functions. It is important to monitor the dissection process and attend to individual questions. For these reasons, the lab is best suited for 10-15 students.

After the first dissection lab, students receive a second sheep brain the following week and perform the steps again. During the second lab dissection, students are quizzed on brain structure and function without notes or the dissection guide. They are asked to individually dissect the brain in 15 minutes without assistance. Next, students are randomly called into a separate lab room for a verbal quiz. A typical brain quiz involves identification of 26 sheep brain structures and corresponding functions. Informal assessment of this activity seems to indicate that many students enjoy the experience, as many have not dissected brain tissue before. Further, students indicate that identifying sheep brain structures and functions helps them to transfer knowledge to the human brain.

Annotated Bibliography

Active Participation of Neuronal Communication

A. Hamilton and Knox (1985) described a large lecture demonstration (which be modified for smaller classes) of the anatomy and physiology of neurons. Thirty student volunteers act out the cellular processes involved in presynaptic and postsynaptic neuronal activity. Students are assigned to the following roles: muscle cell, afferent and efferent axons, soma, dendrites, synaptic knobs, receptors, neurotransmitters, enzymes, sodium ions, and action potential. The authors provided detailed steps for conducting this 30-min activity and described necessary props and materials. Student evaluation of the exercise indicated that this demonstration was more helpful than a lecture review in understanding neuronal communication.


Felsten (1998) described an active participation exercise in which students demonstrate action potentials in myelinated and unmyelinated axons. Students come to the front of the class and act as a segment of an axon. The position of the students’ hands represent the membrane potential—hands below the head have a negative membrane potential whereas hands above the head are positive. By changing the position of the students’ hands, the instructor can demonstrate resting and graded
potentials, the all-or-none threshold, and the action potential. The same instructions can be applied to showing students how the speed of the action potential differs in myelinated and unmyelinated axons. Assessment of the exercise showed that introductory psychology students and upper-level students who participated in the activity had higher quiz scores than students who were dismissed from class after hearing a lecture over the same material. In addition, students rated the activity as more helpful, interesting, and fun than a textbook explanation of the generation and transmission of action potentials.

- Reardon, Durso, and Wilson (1994) described exercises to demonstrate neuronal function and communication. The first set of demonstrations focus on neural coding, showing how excitatory and inhibitory postsynaptic potentials summate to produce an action potential. Seven students can participate—one in a receiving neuron role and six as excitatory inputs. Students acting as neuronal inputs receive an index card marked with the letter “E.” The student acting as the receiving neuron fires an action potential only when three “E” cards are flashed. The simulation can last for 1 or 2 min. The second exercise incorporates the effect of inhibitory signals on neuronal function, and instructions are given to demonstrate temporal and spatial neuronal summation. The second set of demonstrations uses the concept of “musical chairs” to teach students synaptic transmission including concepts of neurotransmitter release, blocking receptors sites, and preventing reuptake of neurotransmitters. The effectiveness of the neural coding exercise was assessed by comparing students in the exercise condition to students in a lecture condition on a quiz of neural coding. Students in the neural coding exercise condition achieved higher quiz percentages compared to the lecture groups. There was no assessment of the effectiveness of the synaptic transmission exercise.

Demonstrations of Brain Function and Neuroanatomy

Morris (1991) described five activities that illustrate the verbal and visual deficits seen in patients with a severed corpus callosum (i.e., split-brain patients). Two students sit next to each other in the same chair. The student on the left becomes the left hemisphere of the brain and the other student is the right hemisphere. Using only their crossed inner hands (outer hands are placed behind their backs), students are asked to perform a variety of functions with and without a blindfold, including tying a shoe and object recognition tasks. An important aspect of the exercise is that the student acting as the left hemisphere (where language is generally localized) is instructed to give no verbal cues to the right hemisphere, which approximates the behavioral difficulties observed in split-brain patients. The majority of students in introductory psychology courses rated the demonstration as either “helpful” or “very helpful.”

- Wilson and Marcus (1992) described a unique way to teach the neuroanatomy of a sheep brain by having students construct a brain using PlayDoh™. Students are instructed to use PlayDoh™ to model all major brain regions and structures. In the article, the authors provided instructions for the brain construction as well as hand-drawn figures of the PlayDoh™ brain from various neuroanatomical directions. The lab to create the brain model takes 1.5 hrs to complete. Overall, students rated the PlayDoh™ brain model lab as a positive learning experience (average of 6.1 on a 7-point scale). Further, the authors argued that the modeling lab can help students understand the brain’s three-dimensional nature and can be used as an effective supplement to traditional sheep brain dissections.
- Daniels (1979) also used a modeled brain activity to help students learn neuroanatomy of the human brain. Students were asked to construct a sagittal (half) section of the human brain using clay. The construction of all the major neural regions and structures were thoroughly described in the article. Informal and formal student feedback indicated that the activity was “interesting” and “useful.” Further, the vast majority (90%) of students who made clay brains indicated that the task was “helpful” or “very helpful” in learning brain structures.


Demonstrations of Behavioral Pharmacology

Students in a physiological psychology course determined the effects of a variety of psychoactive drugs by observing the behavior of hooded female
rats. The instructor assigns students into five teams (two students per team). Students are instructed to weigh and handle the rats for 2 weeks prior to drug testing. Students read articles relevant to animal drug studies, and each team identifies four to six behavioral tests that could be used for the lab. The instructor then selects five drugs to use (from a list of 20 possible drugs). The drugs selected belonged to one of the following categories: sedative-hypnotics, barbiturates, stimulants, or ethanol. The instructor gives drug injections to the rats 2 hrs prior to the student observations. Students are required to observe and record the behavior of rats in both a drug and nondrug state (control). Three progress reports are assigned to students in which they determine the general and specific drug category given to the rats, the drug name, and supportive literature findings. The author found that most teams were able to identify correctly the general drug category administered. Students reported that they were enthusiastic about the lab activity.

- Briner (1996) provided a behavioral pharmacology demonstration that would be well suited for a physiological psychology laboratory. Similar to Schumacher (1982), students are required to record the behavior of rats following the administration of certain classes of drugs. The drugs include lead, barbiturates, amphetamine, anticonvulsants, steroids, and antipsychotics. Through this demonstration, students observe dose-response characteristics of several drug classes and learn the importance of selecting the appropriate behavioral test(s) in pharmacological research.


Final Exam Preparation for Physiological Psychology

Ackil (1986) described an activity in which students participate in a final exam review session for physiological psychology by playing a game called PhysioPursuit. The questions are asked in a trivia-style format similar to the popular board game, Trivial Pursuit. Throughout the semester, the instructor prepares a variety of short-answer questions on 3×5-inch index cards. These cards are used as the question cards during the game. The game is played on a gameboard with a picture of the brain in the center and individual game pieces representing different colored neurons. Ackil found that students enjoyed the competition of the game and seemed to learn new material.

Engaging Activities for Students Who are Learning Research Methods

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Along with statistics, students often view research methods as an evil stepsister in the psychology curriculum. Unfortunately, many students who take research methods do not, at least initially, appreciate the beauty of the scientific method as a means to furthering knowledge. Thus, it is incumbent that research methods instructors reveal to students the beauty of science by actively engaging them in the learning process.

Many instructors know firsthand the disinterest and trepidation their students feel when they take a research methods course. Fortunately, many of these instructors also know the benefits of active engagement, have developed activities that engage their students, and have shared their ideas through publications. A variety of handbooks provide a rich source of ideas (Benjamin, 2008; Benjamin, Daniel, & Brewer, 1985; Benjamin & Lowman, 1981; Benjamin, Nodine, Ernst, & Broeker, 1999; Dunn, Smith, & Beins, 2007; Hebl, Brewer, & Benjamin, 2000; Makosky, Sileo, Whittemore, Landry, & Skutley, 1990; Makosky, Whittemore, & Rogers, 1987; Saville, 2008; Ware & Brewer, 1988; 1999; Ware & Johnson, 1996a; 1996b; 1996c; 2000a; 2000b; 2000c; Whittemore, & Rogers, 1987). This chapter focuses on activities described in journal articles that included assessment of effectiveness. It also includes descriptions of a few activities that I have used in my research methods course.

Annotated Bibliography

A Cooperative Learning Approach

Students work in collaborative teams, with five students per team, to conduct three research projects for the course. Each project consists of five phases (research question, research design, data collection, data analysis, and research presentation), with each phase lasting about 1 week. The instructor implements principles of problem-based learning and cooperative learning to facilitate effective teamwork. Students in this course rated the discussion, interest, and learning higher than those in traditional lecture sections.


The Feeling of Deception

Students complete a bogus personality test, receive feedback from the test, rate the quality and usefulness of the test, learn that everyone received the same bogus feedback, and then discuss what it feels like to be the subject of deception. Students reported that they learned about the Barnum effect, as well as the impact that deception may have on research participants. Some students did not enjoy being manipulated by the exercise, but nearly all saw the value and purpose of the exercise.


Measuring Constructs

Students select a psychological construct, develop a conceptual definition, and perform a database search for existing instruments to measure the construct. Then, students select one instrument (and associated publication) that matches their conceptual definition and one that does not. Finally, students make a presentation in which they compare and contrast the two instruments along several dimensions. Pretest and posttest measures showed that students who engaged in the exercise answered more questions correctly on a short survey designed to assess the goals of the activity.

Scale Development

First, the instructor lectures on a psychological construct (e.g., sensation seeking). Students develop two items on a 7-point scale to measure the construct. After the instructor lectures on scale development, students critique the items for clarity, validity, and social desirability. Students revise some items and remove others. Students administer the final scale to research participants, who return 1 week later to complete the scale again, along with a battery of other scales designed to assess convergent and discriminant validity. Students learn how to use SPSS to assess reliability, to assess validity, and to perform the analyses. Students complete the activity by writing a research report in APA format. The authors reported success with this activity over several semesters, including the fact that students generally developed good scales.


A Four-Stage Content Analysis Research Project

Students use content analysis to study an example of stereotyping in the media by (a) searching the literature to identify a research question; (b) selecting a medium, coding scheme, and unit of analysis; (c) developing a coding sheet and collecting data; and (d) evaluating limitations of external validity and implications of results. Students produce written documents for each stage of the project and produce a poster at the end. Students reported that the project improved their research skills.


Becoming Critical Consumers of Research Reported in the Media

Working in small groups, students answer a series of questions regarding a research report in the media, discuss their answers as a class, receive additional information from the actual research article, identify flaws in the media report, generate recommendations for better reporting, and then complete a similar homework assignment in which they compare a media report to the original research article. A short survey showed that students believed the exercise was useful.


Collaborative Writing and Peer Review as Aids to Report Writing

Working in pairs, students write a research proposal, receive instructor feedback, conduct the study, write a draft, engage in peer review, and make final revisions. Students also maintain a process journal to describe the work performed by each member of the team. Although 40% of students reported they would rather work alone, most reported that they shared the workload and that the collaboration enhanced their learning.


Writing Letters to Explain Concepts

Students select a research methods concept and write a letter about that topic to another student taking the same course. The letter addresses the concept itself and why the concept is important for the course, for psychology majors, and for the general public. Letter recipients then write a reply letter. Students generally liked the activity, and analysis of the letters showed that most students provided an accurate description and often corrected confusing or incorrect information in the reply letter.


Validity and Interviewing

Students begin by critiquing a mock interview based on principles provided by the instructor. Then, working in small groups, they develop a set of interview questions to measure a personality trait. Students then test their questions by conducting a pilot interview on a student from another group. Students discuss and edit their questions. Before the next class, each student interviews a participant with the set of questions and administers an established scale to measure the same personality traits. Students discuss and analyze measures of convergent validity. This activity resulted in positive student evaluations and higher test scores on items related to the activity content.


Revealing Experimenter Bias

The instructor informs students about participant bias, tells them that alcohol will decrease performance on a mirror-tracing task, and has a
confederate perform the task after consuming different amounts of a supposed alcoholic drink. Students rate the confederate’s speech and task performance. Although the confederate exhibits stable levels of performance, students rated that the confederate’s speech and task performance decreased with increasing levels of alcohol. The class then discusses the issue of experimenter bias. Students reported that the activity was an effective demonstration of observer bias.


**Comparing a Media Report to the Actual Journal Article**

Students read a media report (selected by the instructor), answer a set of worksheet questions, read a journal article that served as the source of the media report, answer a set of worksheet questions, answer additional worksheet questions that compare the two reports, discuss their worksheet answers in small groups, and engage in discussion with the instructor regarding the limitations of media reports. Students who engaged in this activity were better able to answer questions about the issue than students who did not.


**Solving Riddles to Learn About the Scientific Approach**

The instructor poses a riddle to students, who then ask the instructor a series of yes/no questions to solve the riddle. Students then work in small groups on a series of riddles, with one member of each group serving as the person with the answer who responds to the yes/no questions. Finally, the class discusses the principles of the scientific approach learned by the activity, including influence of perspective, the danger of assumptions, posing good questions, importance of contradictory information, persistence, simplicity, and excitement. Students reported that the activity was interesting, useful, and the instructor should use it in the future.


**Making Ethical Decisions Regarding the Use of Animals in Research**

Students role-play being a member of an animal care and use committee and work in small groups to make yes/no decisions regarding animal research proposals based on actual situations. After learning about different philosophical positions regarding the use of animals in research, students read research proposals and work to reach consensus regarding the ethics of the proposal. Each of the four proposals addresses slightly different issues. Nearly every student recommended that the instructor use the activity in the future.


**Observations in the Cafeteria**

This activity describes how students can perform naturalistic observation, correlational research, and experimental research with patrons of a campus dining facility. For naturalistic observation, students choose a variable to observe, provide an operational definition, and perform descriptive statistics. For correlational research, students select two quantifiable variables to observe (with some suggestions from the instructor) and create a scatterplot. For experimental research, students select an environmental variable to manipulate and record behavior. The activities provide opportunities to discuss various aspects of research methods, including the advantages and disadvantages of different methods. Evaluation showed higher test scores and more positive feedback from a class that performed the activities than from a class that did not.


**Gender Differences in Smiling**

Students bring a yearbook to class, and the instructor informs them to begin with the assumption (null hypothesis) that there is no difference in the frequency with which young men and women smile. Students decide on the alternative hypothesis, discuss possible operational definitions of smiling, collect data, and write a conclusion. Students discuss the importance of operational definitions, interpretation of results, external validity, and other concepts. Students reported that the activity was effective, fun, and useful for future classes.

Wording of Survey Questions
Students collect data for two surveys that only differ in the wording of the questions; compare mean participant responses; and discuss issues such as implicit assumptions, ambiguity of terms, validity, and interpretability. A pretest-posttest assessment showed that students were better able to identify and correct poorly worded scale items.

A Hands-On Touch Perception Experiment
Using cookie-cutters, students perform a replication of a touch experiment that compares perception with active touch versus passive touch. In the active touch condition, participants have 2 s to move their fingers on the shape, whereas in the passive touch condition, they simply sense the shape pressed into the palm of their hand. Working in small groups, students serve as experimenters and participants to collect data, analyze data, discuss extraneous variables, and assess possible improvements to the procedure. Students then implement their new procedure, research additional literature and write a research report. Students reported that this study was their favorite of the semester, and faculty reviewers judged their research papers better for this study than other performed during the semester.

Graphs Prevent Gaffes
Students work with four bivariate data sets that result in the same Pearson $r$ value. However, two data sets include outliers, and one data set represents a curvilinear relation. Students calculate the Pearson $r$ correlation coefficient for each data set and produce a scatterplot for each data set. Then for each data set, they write a paragraph that reports the $r$ values, a paragraph that describes the relation between variables, a paragraph that describes the appropriateness of using the Pearson $r$, and a paragraph that describes what they learned from the activity. A review of the student paragraphs showed that most students responded correctly, and most correctly described the issues involved with outliers and nonlinear relations.

Designing a Survey for Graduating Majors
Students learn about survey research, work collaboratively to develop items for an exit survey of the undergraduate psychology majors, refine the items, develop a consent form, collect data, analyze data, and work individually to write an APA-format research report. In a follow-up questionnaire, students reported that the project helped them learn a variety of concepts and increased their interest in conducting research.

Understanding APA Style
This article describes an out-of-class activity where students use the APA Publication Manual to detect a variety of style errors in a poorly constructed manuscript. Students who completed the activity scored higher on an APA-style posttest and provided positive self-report ratings of the activity’s effectiveness. Scores on the activity were positively correlated with grade on a subsequent research report.

Predicting Test Performance
Students in small groups design a survey with five questions (predictor variables) designed to predict performance on an exam. Questions from all groups form a questionnaire given to all students. The instructor analyzes the data and provides a detailed regression report to students. Each group then makes a summary presentation to the class regarding the quality of their items. The instructor provides extra credit points based on the predictive power of the five items. Students reported that the activity was effective in demonstrating the challenges of generating a survey and in the concepts of regression analysis.
Activity to Demonstrate Regression to the Mean in Therapeutic Treatment

Students self-report their mood and recent food consumption, undergo an obviously ridiculous treatment (e.g., touching an elbow and repeating a mantra), wait several days, and again self-report their mood and recent food consumption. The instructor collects the data, selects the top 10% and bottom 10% pretreatment scores, pairs those scores with the posttreatment scores for the same students, and creates a line graph depicting the means before and after treatment. Students discuss explanations for the absurd effect of the treatment and, after evaluating several possible extraneous variables, realize the regression to the mean explanation. Students reported that the activity was enjoyable and useful.


Testing Astrological Claims

Students determine their astrological sign, describe astrological assumptions about human behavior, learn about the scientific method, work in small groups to generate a hypothesis based on an assumption, share their hypotheses with the class, and then test the hypothesis that particular zodiac signs are associated with particular personality traits. Students then select a set of personality traits that best describe themselves. The instructor collects the data, analyzes the data, and discusses how statistics provide a conclusion. Students reported that the activity was valuable.


A Script Activity to Learn the Steps of Research

Students learn about scripts, develop a list of actions to complete a research project, work in small groups to compare their scripts, share their lists with the class, and develop a composite script. Initially, students receive the first (get project idea) and last (publish research) items of the script and then list, in sequential order, about 20 actions necessary to progress from the first to the last item. Students subsequently get into small groups and compare their scripts. All students report their items to the class in an effort to create a composite script that is then compared to a script developed by actual researchers. Student surveys and reports suggested that the activity was effective.


Observing Behaviors in a Television Program to Learn Techniques of Observation

After listening to a lecture about time sampling, event sampling, and trait rating techniques of observation, students work in small groups to develop a method for using one of the three techniques to observe certain behaviors in a predetermined television show. After making observations, students calculate intrarater reliability for their technique. Students discuss the pros and cons of their technique, compare reliability measures across the different techniques, and discuss the advantages and disadvantages of the three techniques. Students believed the activity was effective and recommended it for future use.


Additional Ideas for Engaging the Student

I now include several activities from the instructor’s manual that Pete Badia and I coauthored a few years ago for our textbook *Fundamentals of Behavioral Research* (Lammers & Badia, 2004).

Reliability of Observations of the Instructor

At the beginning of a class period, tell students that they will observe and record a particular behavior exhibited by you (the instructor) during the course of the class period. They can either record the occurrence or nonoccurrence of the behavior during specified time intervals (e.g., 10-min periods) or they can keep a running total of the number of times that the behavior occurred during the entire class period. Tell them that they will select a particular behavior and that you will not know the behavior selected. They should select a behavior that is likely to occur several times during the class period (e.g., saying a particular word, making a particular hand gesture, walking to a particular location at the front of the room). After deciding on the method of observation (time intervals or total number), leave the room for 2 min and ask the students to agree on the behavior to be observed and then begin recording when you return to the room. At this point, continue with the topic for the day.
You can either discuss this activity at the end of the class period or the beginning of the next class period. Select two observers who did not sit next to each other to share their recorded observations with the class. Ask the students why you did not select two students who sat next to each other and emphasize the importance of independence of observations. Calculate a measure of interobserver reliability (the particular method will depend on the method used to make observations). Discuss why the reliability was high, moderate, or low. Discuss challenges the students encountered during the observation period. Discuss why it was important for you not to know the behavior that students observed.

Sources of Extraneous Variability

Most textbooks list at least a dozen possible sources of extraneous variability in an experiment, organized into one of three categories – sources due to participants, sources due to experimenters, and sources due to method. One of the best ways to understand these design flaws is to design hypothetical experiments that include these flaws. Students should work in small groups, and the instructor should assign each group two sources of extraneous variability. For each source, the groups should develop a hypothetical experiment in which the source of extraneous variability is a significant design flaw. Depending on class size, all or some of the groups should present their hypothetical experiments to the class. Students then determine which design flaw (i.e., which extraneous variable) is exhibited in each experiment. (Another option is to assign secretly two sources to each group. The groups then write their hypothetical experiments on a piece of paper, after which they exchange pieces of paper and attempt to determine which source of extraneous variability is the flaw in each study.)

Concluding Statement

Research Methods is a challenging course to teach. Many students perceive the terminology as difficult, do not foresee a future in which they will engage in research, and are relatively unaware of the everyday situations in which they are consumers of behavioral research. But what student does not like to go on a treasure hunt? The treasure is the discovery of principles that describe and explain human behavior and thought; there can be no better treasure for a psychologist. To reach the treasure, behavioral scientists must search for and uncover the clues that lead to the hidden treasure. The clues are created by the research they perform. Useful clues are those that lead further down the correct path. Researchers will uncover useful clues only if they ask good questions, design sound studies, properly analyze their observations, and critically interpret their results. Teachers need to engage students in the treasure hunt. Students should practice the skills that provide the clues and actually experience the excitement of finding a clue. It is nice to read a story about a treasure hunt, but it is so much more fun to participate in one!

References


Activities for Student Engagement in a Statistics Course

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Many psychologists have written about students’ apprehension for statistics (e.g., Baloglu, 2003). Others, including the authors of *Statistics Without Tears* (Rowntree, 2004) and *Statistics for the Terrified* (Kranzler, 2007), have even attempted to address students’ fears in their textbooks. There is good reason for this concern: Students who are anxious about or who have little faith in their ability to do math typically perform worse in statistics courses (Adams & Holcomb, 1986; Zeider, 1991). Thus, students’ fears remain an issue for many statistics instructors.

Actively engaging students in the material is one manner of addressing this issue, and there are numerous ways of incorporating “activity” into a statistics class. Below, we discuss several activities used in a psychological statistics course, including (a) using applets for demonstrations, (b) incorporating current news articles pertaining to psychology, and (c) a data collection project.

**Computer Demonstrations and Applets**

Many statistics textbooks now come with online applets or other activities that students can use to gain a better understanding of statistical concepts. For example, McClelland’s (1999) *Seeing Statistics* is a series of applets that teaches concepts such as variability, hypothesis testing, power, and regression. Using these applets, students can see a visual representation of the concepts covered in their textbooks. They do not have to rely on the technical or artistic skill of the instructor.

**News Articles in Psychology**

One of the primary difficulties in teaching statistics is helping students see the relation between the technical knowledge they need to learn and the bigger picture in psychology—in other words, why they should be interested in this technical knowledge. One way in which we attempt to teach this relation is by discussing news articles related to psychology at the beginning of each class. For example, if we are talking about correlation, we will present a popular press article about a psychological study that used correlational methods. This serves two purposes. First, we can show students how the concepts they are learning in class relate to psychological research that might be of interest to them. Second, it is an opportunity to highlight differences in how the media and researchers present the same findings. By integrating popular press articles pertaining to statistics, we can help build students’ critical thinking skills. Finally, we often add assignments throughout the term where students bring in articles from the media that touch on psychology, and students can explain what types of statistics would be appropriate to use to analyze those data. Students report that they appreciate the connection between what they are learning and what they hope to do as a profession.

**Data Collection Project**

We group students into pairs based on their reported interests and then ask them to collect and analyze data. In their pairs, students identify two variables, such as amount of exercise and self-esteem, and then either construct questionnaires to measure those variables or incorporate existing measures into their studies (we ask that students avoid questions about underage drinking, drug use, or other possibly illegal activities.) Students also collect limited demographic data (e.g., gender, GPA) so they can run at least two different statistical analyses on their data set. The students then anonymously answer the surveys for their classmates. With this project, students learn about survey construction and administration; collecting, entering data, and analyzing data; and writing up their results. Often students report that this project is their favorite part of the course because they can see an application of the methods they are studying.

**Approaches for Structuring the Statistics Course**

**Hypothesis Testing**

Describes a freely available online tutorial that teaches hypothesis-testing concepts. The instructor assigned one section of psychological statistics
students to complete an online hypothesis-testing tutorial that included a packet of information about the tutorial, an assignment, and a follow-up quiz. The other section received the regular assignment and the same follow-up quiz. Students in the tutorial condition performed better on a quiz than students in the control condition.


**Just-in-Time Teaching**

Describes a web-based teaching strategy known as Just in Time Teaching (JiTT). The authors compared JiTT to lecture in two sections of an undergraduate statistics course. Students in the lecture group took a five-item, in-class quiz over reading assignments prior to hearing lectures over the material. Students in the JiTT condition completed sets of questions on the Internet before class. The instructor then discussed students’ answers to the questions in class. The JiTT group scored significantly higher than the control condition on the final exam.


**ESTAT Software**

Describes the use of ESTAT software to help teach psychological statistics. This software requires students to “eyeball” data and analyze statistical output. For example, the computer might give a diagram of a data set and ask students to estimate the mean and standard deviation. Then the software gives the actual estimates and shows students how close they were to the actual estimates. The article describes two different activities in which ESTAT was helpful as a review. Students reported that the software was engaging and interesting and recommended its use in future courses.


**Generating Practice Problems**

Describes the use of student-generated word problems to teach statistical concepts. First, students worked in groups of two or three to generate practice problems and data for statistical tests. Next, students solved the problems they created. Groups then exchanged word problems and examined each other’s work for mistakes. At the end of class, students put their problems in a box. Every other week, students randomly selected problems out of the box and tried to solve them. Because students had to design the problems, they had to think of the types of data that were acceptable for each statistical test. Students reported that the technique was effective in helping them learn statistical concepts.


**Jigsaw Classroom**

Describes a way of combining in-class work on statistical problem sets with a jigsaw classroom. In a jigsaw classroom, the instructor breaks down complex problems into smaller parts, with each student being responsible for a portion of the material. In this way, students have to cooperate and rely on each other for information that will help them learn the material. The authors provided two examples of statistical problems that teachers could use—an ANOVA problem and a chi-square problem. Student evaluations of the activity were positive.


**Developing Statistics Portfolios**

Describes a portfolio activity for an introductory statistics and methods course designed to integrate statistics concepts into the psychology curriculum. The stated goals of the activity were to improve learning by requiring students to compile information into a concise resource and provide students with a personally relevant resource for future research. The instructor provided guidelines for the portfolios, including a suggested list of topics (with page limits); instructions to explain material in students’ own words; and encouragement to provide many examples throughout the portfolio. The instructor and an independent rater evaluated the accessibility, anticipated value, and uniqueness of the portfolio to compile a quality rating. There was a positive correlation between portfolio quality and course grades, while controlling for GPA and math anxiety. Furthermore, advisor ratings showed that students who completed the portfolio assignment required less assistance on their senior theses than students who did not.

Teaching Calculations
Examined whether requiring students to complete statistical calculations resulted in improved comprehension. Seabrook examined the relation between calculation competence and statistical thinking, while controlling for scores on a pretest and grades in the course. The control variables accounted for 26% of the variance in statistical thinking scores, whereas computational competence accounted for an additional 2%, which was significant.


Online Tutorial Generator
Describes an online tutorial generator for statistics concepts called Statistical Understanding Made Simple (SUMS) (http://www.gla.ac.uk/sums), which allows instructors to upload data and then construct tutorials based on those data. Topics covered in the tutorials include measures of central tendency, understanding standard deviation, the normal curve, t tests, correlations, and interpreting p values. Each tutorial includes three steps: (a) a description and explanation of the statistical concept; (b) exploration of the concept using an interactive component; and (c) application of the information to an example, using the instructor’s data. In this study, use of the SUMS system was positively correlated to statistics comprehension and self-efficacy.


Monte Carlo Software
Describes a computer program called MC4G that teachers can use to explain statistical concepts. The software comes with an instructor’s book that helps the instructor perform Monte Carlo simulations to explain robustness, power, and sample size analysis. The authors used MC4G to demonstrate robustness after presenting a lecture on the assumption of homoscedasticity when studying ANOVAs. Students reported that the computer simulation helped their understanding of the topic. Students in the computer simulation group also scored higher on an exam than a control group that did not view the demonstration.


Content-Related Activities

Main Effects and Interactions
Describes a baking analogy to teach main effects and interactions. The instructor described each independent variable as an ingredient in the recipe with the dependent variable being taste perception. The instructor introduced each ingredient for cookie dough separately and asked students if their taste perception of that ingredient was positive. The instructors also presented the ingredients in different amounts to show that in recipes and in statistics, certain levels of each independent variable are necessary to produce an effect. Finally, the ingredients produced an interaction: the completed cookie. Students in the baking analogy scored higher on a three question posttest than students in a control group.


Chance
Describes an interactive way of teaching the concepts of chance and random occurrences. Students formed dyads and guessed the flavor of a Life Saver while closing their eyes or holding their noses shut. Students then reported whether they identified the correct flavor. Afterwards, the instructor informed students that approximately 20% of them would correctly identify the flavor (i.e., chance). The instructor then gave a follow-up lecture to emphasize the concept of chance. The authors found that students performed well on exam questions related to random events.


Random Assignment
Describes a playing card demonstration for teaching random assignment. The instructor randomly distributed cards to two groups of students. Next students in the groups compared their cards for different characteristics (e.g., numbers, suits of the cards) and recorded the number of times each characteristic appeared in the group. Typically, characteristics in the two groups were roughly the same, which showed that each characteristic is probabilistic. Students in the card condition scored higher on the posttest assessment.


**Multiple Regression**

Describes an activity to illustrate the concept of multiple regression. The goals of the activity were to show students a personally relevant example of multiple regression and to reduce students’ anxiety about learning statistics. Students collected movie reviews of films they had recently seen and provided their own ratings of those movies. Using this information, the instructor taught about predictors (movie reviews), criteria (students’ enjoyment of the movie), predicted enjoyment based on the regression equation, and residuals (difference between the predicted rating and the actual rating). The authors also discussed how to incorporate other multiple regression concepts into the activity. Students reported enjoying the activity and that it helped with their understanding of multiple regression.


**Central Limit Theorem**

Describes an activity to teach the Central Limit Theorem (CLT). The instructor assigned higher numbers to face cards in a deck of playing cards and designated an ace as equaling one. The instructor plotted how many of each card exists in two decks (which produces a flat distribution). Next, the instructor gave each student a sample of three cards from the decks and asked them to calculate their sample mean. The instructor plotted each of the means, which resulted in a normal distribution, and then explained the CLT. Students who viewed this demonstration received higher grades on an open-ended assessment than students in a control condition.


**Applied Statistics Project**

Describes using personal ads to create a statistical application project. The instructor asked students to select personal ads from a newspaper as long as the people in the ads provided their names and the minimum and maximum ages for people they were seeking. There were three sets of 25 ads from three different decades. Students received specific instructions and recorded the ages and genders of people in the ads and the time period of the ad. Students then compared the ads using Pearson correlations and ANOVAs and wrote the Methods and Results sections of an APA style paper. The authors found that students’ performance on final exam items related to these concepts exceeded 90%.


**Standard Error of the Mean**

Describes an activity to help students understand standard error of the mean. The instructor used two bags filled with slips of paper with different values (e.g., 0, 3, 6). Each bag represented a population, with one representing a situation where the null hypothesis was true and one representing a situation where the alternative hypothesis was true. In both bags, the same values were represented, but in different frequencies, resulting in different means for the two “populations.” Students drew three pieces of paper from the bag with replacement. They calculated the mean of their sample, got into groups, recorded the values from their group members, and calculated the sample mean. The instructor then made a sampling distribution from the entire class to demonstrate the Central Limit Theorem. Exam performance was higher for those students who completed the exercise.


**Sampling Distributions and the Central Limit Theorem**

In this statistics activity, undergraduate students used the landscape at their university to learn about sampling distributions and the Central Limit Theorem. Students in two statistics courses counted the number of roses on rose bushes around campus. The students sampled either 30 bushes or 60 bushes and then computed means and standard deviations for their samples. Student responses indicated that they enjoyed the activity. Furthermore, understanding improved following the activity. The authors suggested using the natural environment to encourage activity and engagement in the statistics course.


**Factors Affecting the F-ratio**

Describes a class activity for illustrating the impact of effect size, individual differences, and measurement error on power in an ANOVA test. The instructor assembled two boxes, one labeled “between” and one labeled “within,” and selected
items of different weights to represent individual differences (e.g., an action figure), measurement error (e.g., a stopwatch), and treatment effect (e.g., batteries of different sizes). The instructor then manipulated the weights of the different boxes using the items and asked students to determine if the boxes were of equal weight. The instructor also manipulated the conditions under which students made their estimations. For example, in one situation, each box contained only measurement error and individual differences. In other cases, the instructor added different-sized batteries to the “between” box. Students were more certain of a difference with the larger treatment effect (i.e., battery) sizes. Students reported that the activity was useful in understanding the F-ratio.


**Factor Analysis**

Describes a way in which undergraduate teachers of statistics (or other courses) can introduce the complex concept of factor analysis. The authors suggested introducing the concept with a personality test example or when introducing the concepts of instrument development. To illustrate the concept, instructors developed a set of hypothetical instrument items relating to a specific concept (e.g., anger, instructors developed a set of hypothetical instrument instruments. To illustrate the concept, instructors wrote several items that would relate to more than one category and several items that would be negatively correlated with other items. During the activity, each student selected an item and, then, by discussing their items with other classmates, formed a group of items that would likely relate to each other. With their group members, the students then constructed a name for their group of items. The ensuing lecture discussed how students made their decisions and how a statistical factor analysis works. Students enjoyed the activity and performance on related test items was slightly improved, compared to students in a course with no factor analysis activity.


**General Activities**

**Reducing Student Anxiety**

Describes a technique to reduce student anxiety toward statistics on the first day of class. The instructor had students complete a questionnaire that contained questions about their level of anxiety about the course. Next, students drew numbers from a bag, which the instructor then wrote on the board. The students then answered questions about their numbers, such as overall mean of the distribution and the distance a particular number was from the mean. The instructor then demonstrated that with more and more numbers, students could be more confident about their guesses. A posttest revealed less student anxiety towards statistics.


**Active Involvement**

Describes a method of teaching that uses students’ bodies and the space in the classroom to talk about statistical concepts. It involved students standing at the front of the class on an imaginary number line corresponding to a rating scale (e.g., strongly disagree to strongly agree). Students then answered questions regarding how they felt about different topics. By physically moving to the point that corresponded to their own opinions, students could clearly see the distribution of the responses in class. Other examples involved a human scatterplot to describe correlation and regression. This exercise interested students, who reported that it nicely complimented the textbook. The author subjectively noted that this exercise helped decrease the negative association students had with statistics.


**Teaching Core Terms in Statistics**

Evaluated the importance of teaching different concepts discussed in undergraduate statistics texts. The author compiled a list of 374 statistical terms from introductory statistics texts and then surveyed a sample of statistics instructors across the United States regarding the importance of teaching the different terms. The author randomly divided the list of 374 items into three different, orthogonal lists before distributing them to the statistics instructors. Approximately 63 instructors rated each item’s importance (1 = slightly important, 2 = moderately important, 3 = extremely important). The author listed the top 100 concepts to teach in a statistics course, the top five of which were normal curve, statistically significance, bell-shaped curve, significance level, and hypothesis testing. This article would be useful for teachers who are deciding what concepts to cover in their courses.

**Statistical Reasoning**

Describes a handout used to teach statistical reasoning to students. Three sections of a psychological statistics course received a handout divided into six parts that included information on statistical reasoning for everyday problems. Each part of the handout included text and practical reasoning exercises that students completed outside of class. The students completed a statistical reasoning assessment before and after the course. Students who received the handout improved more on statistical reasoning than students who did not use the handout. The authors provided examples of the statistical reasoning problems in the article.


**Music as a Mnemonic**

Describes using music as a statistical mnemonic. Students in one section of a psychological measurement course learned and sang three statistical jingles while another section read definitions of terms out loud in class. Both sections took a four-item short answer test related to the definitions and jingles. Two faculty members scored the tests independently of one another. Learning the jingles significantly improved the students’ test performance.


**Simplifying Statistical Concepts**

Describes a handout used to help simplify statistical concepts. The authors noted that when instructors expect students to determine which statistical test to use on their own, students often get confused. This humorous handout puts students in the role of a detective on Statistics Street. It is a reference to which students can refer throughout their studies. The authors noted that it might be especially helpful when students have an end-of-course project they must complete on their own. Students reported that the handout was useful.


**References**


Activities for Engagement in a Psychometric Course

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Psychometrics courses introduce students to the concepts and issues central to psychological assessment. Key to this endeavor is a review of basic statistics along with a more-detailed examination of the statistical concepts most relevant to test design and construction. In addition, many psychometrics courses provide a general overview of the use and application of psychological testing in different domains. As such, a comprehensive psychometrics course will teach students the essential skills relevant to evaluating psychological tests and assessments and the critical thinking skills needed to interpret psychometric findings.

With a central objective of providing students with a basic foundation for understanding the development and purpose of psychological tests, it is not surprising that many students perceive the overall topic of psychometrics to be dry or irrelevant to their professional goals. This lack of enthusiasm for the course material is compounded by the early emphasis on statistics (with a key focus on reliability, validity, and item analysis). Fighting against students’ fear, anxiety, or dislike of statistics, instructors must use strategies to engage students and actively involve them in the learning process. Below, we discuss strategies for (a) analyzing psychometric information in the popular media, (b) evaluating the validity of online tests, and (c) constructing effective assessments.

Analyzing Psychometric Information in the Popular Media

To begin a psychometrics course, we focus students’ attention on an applied aspect of testing by asking them to analyze psychometric information in the popular media. Specifically, students use popular media sources (e.g., newspaper, magazine, online reports) to locate an article focusing on psychological testing or measurement. The article might discuss the results of a test, introduce a new use of testing, or debate the relevance of testing. A common example used by many students is the “No Child Left Behind” Act. Students then bring their articles to class where we discuss operational definitions that differentiate psychological testing from related forms of testing as well as the overlap between various domains of testing and different types of psychological tests. In addition, we critically analyze the articles by discussing any statistical evidence the authors reported along with misconceptions that might be evident. This activity is a nice way to foster students’ active discussion of psychological testing and provides an overview of upcoming course topics.

Evaluating the Validity of Online Tests

To promote a clear understanding of the concept of validity, while encouraging students to become more critical consumers of the psychometric information, students analyze the validity of a personality, ability, intelligence, or attitude measure published in a popular online magazine (e.g., Cosmopolitan, Parents, Oprah, Men’s Fitness) or website (e.g., Queendom, Colorwize, Personality Tests, Tickle). Students complete the measure, paying particular attention to issues relevant to the expressed or implied validity of the test. At the completion of their investigation, they must answer and be prepared to discuss the following questions:
1. What type of test did you take (personality, intelligence, ability, attitude, etc.)?
2. What type of validity evidence was presented (either directly or implied)?
3. In your opinion, was this test valid? Explain.
4. Provide a recommendation that highlights a way in which the test developers could demonstrate validity of the measure; identify the type of validity (i.e., content, predictive, concurrent, construct, convergent, discriminant) addressed by your recommendation.

Students report that taking tests is one of their favorite course activities and that comparing the validity evidence (or lack thereof) provides a deeper appreciation for the elements necessary for a test to be relevant and useful.

Constructing Effective Assessments

Students consistently underestimate the challenges inherent in writing effective measurement items. To illustrate this point, the class works
together to write learning objectives relevant to the textbook chapters on item writing and item analysis. Then each student develops a quiz that effectively measures mastery of the specific learning objectives. Students must incorporate a minimum of three different item formats but receive no other guidance in the development of their quizzes. Students then exchange their quizzes with other members of the class and evaluate the relevance of the quiz to the target construct, the quality of the items, clarity of directions, and relevance of the scoring system to the objective of the measure. Using the peer evaluations, students revise their quizzes and then distribute them to 10 classmates. Each student receives the completed copies of his or her quiz and completes an item analysis of the results. Using the item analysis along with peer feedback and personal reflections, each student completes a quiz report that critically analyzes the effectiveness, value, and relevance of his or her quiz for measuring the learning objectives. Students report that this process is much more difficult than they believed it would be. However, they also indicate that they have a better appreciation for the small details that can influence the quality of a question as well as unintentional factors of test design that can hinder the validity and reliability of a measure.

The literature highlights a number of specific activities designed to foster student engagement and active learning in a psychometrics course. The following annotated bibliography provides an overview of classroom resources, empirically tested teaching strategies, class activities, and assessment ideas to promote student engagement in psychometrics.

**Activities for General Course Structure**

**Embedding Demonstrations**

Although directed at science classes in general, this article describes the benefits and implications of embedding laboratory-style demonstrations into the classroom. Additionally, it explains how timing (i.e., before, during, or after discussions), purpose, and structures of active demonstrations can aid learning in a science class. Finally, it gives examples of various types and timing of active demonstrations.


**Supplemental Materials**

This interactive website provides a comprehensive bank of major tests, measures, and scales of varying personality-based psychological constructs, ranging from adult attachment tests to word association tests.


**Evaluation materials**

This article describes three measures of student learning in the classroom. The second measure describes an activity that specifically targets students’ understanding of interrater reliability. Students receive a worksheet that describes two methodologies for an observational study and asks questions regarding interrater reliability in the data collection methods. A very specific rubric for grading the activity is also included.


**Team-Based Learning**

This article describes the benefits of a group project conducted via a lab section and homework assignments. The authors provide a session-by-session account of all aspects of the group project. Students are instructed to create an assessment of a predetermined construct provided by the instructor. Students must operationalize the constructs, create items for the assessment, and conduct item analysis. Finally, students write a research paper with introduction and methodology sections and present their findings in an oral presentation. The authors also present students’ and teachers’ evaluations of the project.


**Real World Simulation**

This article describes two project scenarios in which education students apply their tests and measurements skills to real-life situations. In the first scenario, students pretend that they have to fill in for a teacher who is on extended leave. Students create a syllabus, teaching objectives, activities, homework assignments, and assessments linked with the teaching objectives on various cognitive levels. The second portion of the assignment has students create a teaching philosophy and teaching assessment. The authors include examples of actual student final projects in the article.

Virtual Course
The Society for the Teaching of Psychology for Division 2 of the American Psychological Association has produced a webpage (http://teachpsych.org/otrp/syllabi/syllabi.php?category=Tests) in which quality examples of syllabi that have been used in actual courses have been posted for use. There are currently face-to-face courses as well as virtual course syllabi for tests and measurement classes. The virtual course syllabi provide a schedule of topics, ground rules for class interaction, additional resources for students, and descriptions of multiple hands-on assignments.

Incorporating Applied Projects
This article describes how the students in a tests and measurements class completed a semester-long project to create a new teacher evaluation form for their university. Through a series of homework and in-class exercises, students collected data, pilot-tested the instrument, used factor analyses to reduce items, and assessed the reliability and validity of the new scale. Through each phase of the research, class lectures and discussions linked the project to key concepts of instrumentation, statistics, and testing and measurement concepts. The author describes each step in the project but also gives examples of in-class exercises, discussion topics, and homework assignments.


Content-Specific Course Activities

Measurement Theory
This article describes a hands-on class activity in which the students measure a metaphor for intelligence. Students first estimate the number of marbles (intelligence) contained in sealed boxes (subjects). Their estimates are then compared to the actual number of marbles. The values from both the students’ estimates and the actual scores are then related back to measurement theory, true scores, and reliability. The author describes the materials needed, the procedure, and the discussion that the activity entails.


Reliability
This article describes an in-class activity in which students first form small groups and then receive instructions that they will be rating and grading essays written by “volunteers” from their groups. The groups create keys and rubrics for grading the essays under the guise that doing so will illustrate different scoring methods. In reality, the activity is deceptive because fellow students do not actually write the essays. Rather, each group receives the same essay. A subsequent discussion focuses on reliability, interrater agreements, and bias.


Validity
The authors assessed the effectiveness of a classroom exercise in which students actively create a test and assess its predictive validity. The activity consists of choosing a dichotomous characteristic of a classmate (e.g., athlete, musician) to study, breaking students into small groups to create dichotomous test questions, and then having the entire class answer the questions. Test items are discussed and validity is determined. When compared to another introduction to psychology class in which students were taught predictive validity through lecture and discussion, the classroom exercise produced better understanding of predictive validity, higher confidence in testing procedures overall, and more enjoyable classroom atmosphere.


Test Construction
This article describes a term project, conducted in a Korean psychometrics course, in which students created an attitudes questionnaire by developing an item pool, collecting data, analyzing results, and writing a report. The objective of the activity is to show students the principles behind scale construction. The article describes each phase of the project and includes evaluation measures. The exercise increased students’ motivation to learn psychometrics, allowed them to benefit from working in groups, and enabled them to see first hand the problem-solving processes involved in psychological
measurement. Additionally, the article includes cross-cultural implications and considerations.


**Scaling or Levels of Measurement**

This website contains activities, homework assignments, and lectures regarding any topic in psychology. Of those, there are postings for a game that students play in which they read scenarios and choose which level of measurement is being described. The students’ worksheet for the game is also posted. The game’s description can be found at http://www.psychexchange.co.uk/tag/levels_of_measurement/levels_of_data/

**Item Analysis**

This article describes an end-of-the-term group project in which students use theories they have been taught to create (e.g., Bloom’s taxonomy) in order to evaluate classic tests and create their own tests.

Students use peer evaluation and group discussion to analyze whether test items are accurately assessing the corresponding levels of Bloom’s taxonomy.


**Personality Tests**

This article describes an in-class activity and homework assignment that takes place over several class sessions. Placed in small groups, students collectively create items that assess some personality construct. Students then have fellow classmates, friends, and family members complete the survey. Students collect the responses and then plot each data point on the board with the instructor’s help. Students discuss issues in reliability, validity, test construction and measurement, and defining personality constructs.

Courses in the history and systems of psychology currently face neglect. Although the neglect is not vicious, neither is it benign. Stanford University, Columbia University, and many other prominent institutions have eliminated their classes in the history of psychology (Chamberlin, 2010), and in a large survey of departmental requirements and teaching goals for the history of psychology, 24 departments reported that they would drop the course if the current instructor retired (Fuchs & Viney, 2002). Additionally, Fuchs and Viney (2002) found that the mean age of members of the Society for the History of Psychology (Division 26 of APA) was 64.52 years, on the cusp of potential retirement. Many factors contribute to the challenges facing the history of psychology course, including the growing number of other subfields and related topical classes in psychology, the relatively small number of dedicated scholars in the history of psychology, and increased institutional emphasis on funding and on research areas in psychology that can generate more substantial external grants than history (Chamberlin, 2010).

In addition to these larger pressures on history of psychology instructors, students often arrive in their history and systems classes with an amount of dread commensurate with their perceptions of the title. For example, even when students had not heard or seen either option, they reported that they preferred a film about sexuality and communication over a lecture on the history of psychology (Reynolds, 1977). In my own long-distance experience as a naïve undergraduate, I noted that Edwin G. Boring was an early eminent historian and wondered whether his name was diagnostic or coincidental. Wayne Viney’s engaging undergraduate history of psychology class shattered that notion and changed my life. Given the institutional challenges to the mere existence of the history of psychology class as well as students’ potential concerns, student engagement may be more important than ever in this course.

The materials that follow present a previously unpublished teaching demonstration in the history of psychology along with annotated teaching demonstrations for classes in the history and systems of psychology. I review some additional novel activities at the conclusion of the chapter. Beyond classes dedicated to history, I recommend that instructors in other topic classes strive to make the history of psychological subfields come alive for their students (see Wertheimer, 1999).

**Original Demonstration:**
**Experiencing Little Albert**

The famous story of Little Albert (Watson & Rayner, 1920) is a classic in history of psychology classes as well as in other courses, and current interest remains strong (see e.g., Beck, Levinson, & Irons, 2009; for podcasts created for students, see Britt, 2010a; 2010b). Students generally know that researchers performed a classical conditioning procedure with a child and taught the child to fear a white rat by pairing the rat with loud noise, but too often students arrive in the classroom with misconceptions propagated by textbooks and other sources (Harris, 1979). An engaging, previously unpublished demonstration allows students to experience the Little Albert story in ways that are unavailable in typical classroom or textbook presentations (Woody, 2008).

The demonstration follows the procedures of Watson and Rayner (1920). I use my own 4-foot steel bar that is three fourths of an inch in diameter, a hammer, a teddy bear to simulate Little Albert, and a small stuffed rat or rat substitute. First, I remind students of the fundamentals of classical conditioning. Second, I portray Watson, and I ask for a volunteer to portray Rosalie Rayner while reassuring him or her that for class purposes we assume that these events occurred before the affair between Watson and Rayner (see Buckley, 1994). Third, I provide ear protection to each student; inside a classroom, the sound of a hammer striking a steel bar can be loud. Fourth, with the student volunteer’s assistance, I rigorously follow the procedures provided by Watson and Rayner (1920), who described their initial application of the loud
noise as follows: “One of the two experimenters caused the child to turn its head and fixate her moving hand; the other, stationed back of the child, struck the steel bar a sharp blow” (p. 2). Students report that reading about Little Albert does not convey Little Albert’s experience as well as hearing the actual noise from a 4-foot steel bar struck with a hammer.

After the demonstration, students better understand the differences between methodological and ethical standards of today and those of the past, both of which seem lax by current standards. Additionally, students generally report that they perceive the experiment differently, and, even though they recognize that the researchers met the ethical requirements of the time, students report being shocked at the behavior of Watson and Rayner (Woody, 2008).

Annotated Bibliography

Debates about Historical Questions

Faculty debates. Lewin and Wakefield (1983) developed a course on intelligence co-taught by two faculty members with divergent views. Although only some aspects of their topic involved historical questions, each class session involved interactive debate by the two faculty instructors. Although some students reported that the debate format was ambiguous and confusing, others found it “engrossing” (Lewin & Wakefield, 1983, p. 115). Anecdotally, the authors reported that students continued the debates outside of class sessions and even volunteered to find and review additional literature to support particular points. The authors reported that the debate format was stimulating for them as teacher-scholars and also noted that the debates demonstrated to students the dynamic and progressive nature of psychological science instead of portraying psychological ideas as fixed. Although the authors continued their debates throughout the course, teachers of the history of psychology could involve a colleague in a debate for a single class session to engage their students on a particular topic (Viney & Woody, 2002).


Student debates. Zehr (2006) developed several debate topics for students in classes in the history and systems of psychology. For each topic, he provided a brief summary of the issue, specified a historical time period, and provided a relevant historical article. The instructor assigned each student to a topic, and, within each topic, he randomly assigned students to argue pro or con. Students debated each topic in teams of four to six members, and debates generally occupied 30 to 45 min of class time. The instructor and student audience members then evaluated the debaters on several dimensions, and each debate team completed a short reflection paper 1 week after the debate. Zehr (2006) found that students were more likely to change their positions on topics that they debated in class than on topics that were not the subjects of the debates (see Carroll, 2006, for similar outcomes from student debates); Zehr also found that debates “increased student awareness of historical issues” (p. 139). Additionally, students enjoyed the debates and recommended that the instructor use the activity in future classes.


In another study, Zehr (2004) combined debates with role-playing when he asked students to act as faculty who must decide whether to hire William James as a new faculty member. Zehr (2004) randomly assigned students to the pro or con faction of the fictitious department, and members of each faction had to contribute a reason in support of or against James’s hiring. The students spent 20 min summarizing their points, and then each faction nominated a spokesperson to present their views. Zehr (2004) also described a semester in which he added competition and asked students to decide between James and Wilhelm Wundt as a new faculty hire. He reported that students better understood the psychology of James and Wundt, better understood issues of presentism in history, found the activity interesting, and recommended it for future classes.


Playing the Role of a Historical Figure

Student role-playing. Playing the role of a historical figure in psychology requires students to learn about the individual as well as the context in which he or she lived. Cole (1983) required students to play the roles of psychologists and to present a historically accurate scientific talk at a mock APA meeting. Cole (1983) designated a time period (e.g., 1890-1910) and, in some variations, a topic (e.g., child and adolescent psychology). Students selected a research article and topic, acted as author of the article, and completed a 12-min convention presentation based on the article. Cole (1983) required students to present with conviction and to
avoid presentist views; students could not present flaws in their paper beyond those noted by the author, and the students playing convention attendees could only ask questions based on the psychological knowledge available at the time.

Although Cole (1983) did not formally assess this technique, he anecdotally observed that students learned about several important historical phenomena: (a) the consistent presence of errors even in highly regarded publications; (b) the influence of racism, sexism, and other prejudices on the development of psychological science; (c) the limitations of textbook portrayals of history; and (d) the diversity of topics in early psychology. Additionally, students reported that they had not realized how many women were involved in early psychological research (see also Furumoto, 1985; Furumoto & Scarborough, 1986). Cole (1983) also noted some difficulties. For example, presentations required extensive class time, and discussion of the talks remained limited. Students also reported that some presentations were boring or poorly organized. Cole (1983) emphasized these perceptions as evidence of ecological validity of the activity – even famous psychologists sometimes give boring or poorly organized convention presentations. In addition to everything else, Cole (1983) reported that the conventions “provide[d] moments of theatre” (p. 235), including “Hugo Munsterberg” prompting “Herman Goltz” to switch from German to English for the non-German-speaking majority of the audience and “Mary Calkins” excitedly discussing her new experimental psychology program at Wellesley. Overall, Cole (1983) reported that students appeared to learn about the early history of psychology.

Zehr (2004) developed a second student role-playing exercise in which students play the roles of famous psychologists from the early 1900s and then engage in a series of conversations modeled on a speed-dating session. The instructor assigned each student to act as a famous historical psychologist. Next, every student met with every other student in a series of 2-min conversations. Students then wrote about their experiences and about the characteristics and perceived impacts of the historical figures. Students rated the activity as interesting and recommended its use in future classes. Additionally, as recommended by Peden (personal communication, October 25, 2010), rather than use class time for this activity, students could complete these role-playing activities outside of the classroom and bring podcasts to their next class session.

**Faculty role-playing.** In addition to having students participate in role-playing, I recommend that faculty read a biography of a historical figure in psychology and then step out of traditional teaching methods to act as a famous psychologist (Woody, 2010). Rather than strive for painstaking preparation, intense drama, and stellar acting, I encourage teachers of psychology to act as a famous psychologist in ways that are expedient (i.e., to stay concise with their own preparation time and with class time), economical (i.e., to stay within the limits of their own comfort and abilities), and poignant (i.e., to make the experience intellectually relevant to class and meaningful to students). I recommend that faculty members aim theatrically low. As teachers of psychology, our goals are educational instead of dramatic. These goals dictate some important considerations. First, no experience is necessary. Second, enthusiasm can compensate for limited abilities such as mine. Third, simplicity is preferable to complexity. In other words, instructors should feel free to hold and read their notes, limit their costumes and props, and avoid structured rehearsal times for themselves or others. No acting awards are available, and, as stated previously, I encourage instructors to focus on instructional instead of theatrical goals and fit their endeavors to their strengths.

For example, to act as E. B. Titchener in his senior-level history and systems of psychology class, Brett King, an award-winning psychology teacher at the University of Colorado at Boulder, dons doctoral robes, a fake beard, and a British accent. I cannot maintain a British accent without offending people; therefore, when I act as Titchener, I do so without the robes, beard, or accent. I nevertheless present Titchener’s methodology, commitment to his students, and overbearing presence to the best of my ability. Although my presentation is not as realistic as King’s portrayal, my students learn about Titchener’s methods, his system of psychology, and his biography. Anecdotally, students have reported interest in and enjoyment of the activity, despite my limited acting skills.

**Academic Genealogies**

Almost all individuals with doctorates in psychology can retrace their intellectual heritage to a few individuals in the late 1800s, typically William James or Wilhelm Wundt (Goodwin, Dingus, & Petterson, 2001; Terry, 1980; Weigel & Gottfurcht, 1972). In this activity, students build a family tree.
They begin with their own advisors and their advisors' doctoral advisors (and other important mentors) and then trace these individuals' advisors back to early psychologists. In small departments, where a single class can complete a genealogy for every faculty member, students can also trace the lineage of famous (or perhaps just willing and available) psychologists (Goodwin et al., 2001). Academic genealogies demonstrate connections as well as diversity in the history of psychology. Genealogies remain limited in several ways, however. They emphasize people over historical context, they omit many intergenerational influences, and informal mentoring relationships are difficult and sometimes impossible to trace (Goodwin et al., 2001). Despite these limits, students report that they hone their literary search skills, learn about the history of psychology, and learn more about their faculty and advisors.


### Demonstrations of Classical Apparatus

Caudle (1979) noted that early psychologists worked with a wide range of apparatus and that demonstrations were central to the teaching approaches of many early psychologists, including E. B. Titchener and others. Caudle concisely described several engaging activities for the history class, including classic low-budget activities based on the work of such historical luminaries as Aristotle, William James, Edward Thorndike, and Hermann Ebbinghaus; she also described demonstrations that included two-point thresholds, psychophysical methods, and the phi phenomenon. Caudle (1979) further encouraged seeking, collecting, or having students build replicas of the early tools of psychology. Although Caudle (1979) did not assess learning outcomes or student preferences, her long list of demonstrations provides many engaging options for history of psychology teachers.


### Original Demonstration

#### Celebrating Historical Dates

Peden and Woody (2000) recommended celebrating the history of psychology each week or on each day of class. They designed activities to bring history into classes across the curriculum (see Wertheimer, 1999), and these engaging techniques highlight the diversity of the history of psychological science. For each day of class, instructors can consult Street’s (1994) chronological history of psychology or Street’s (2010) Web site, Today in the History of Psychology (www.cwu.edu/~warren/today.html). Peden and Woody noted that on a single day in the fall semester, October 22, an instructor could celebrate the birth of Julian B. Rotter in 1916, the publication of the *Schedules of Reinforcement* (Ferster & Skinner, 1957), or Gustav Fechner’s dramatic 1850 insight into the possibility of a mathematical relation between the mind and body. Peden and Woody recommended homework assignments in which students must identify the most relevant event for a class or a topic for the date, week, or month. Across all of these activities, they warned instructors about the dangers of pursuing trivial details, and they recommended connecting any discussion of the events of the date or week to class content and goals so that students engage in personally relevant activities that involve meaningful learning (Peden & Woody, 2000).

### Original Demonstration

#### Guest Speakers and the Context of Psychology

Despite calls by Furumoto (1989) and others for increased awareness of the role of context in psychological history, many of the demonstrations described here emphasize historical individuals. Students should also recognize and engage with the context of history. I recommend that instructors consider inviting guests who were students or academics in the first half or the middle of the 20th century to talk about the larger academic context of psychology. Anecdotally, students in my classes often take for granted that women are present in today’s classrooms and that these women can live independently, drive themselves to campus, and wear pants to class. Today’s students may not realize that their mothers or grandmothers did not have some or all of those privileges on many university campuses through the 1960s and even on some campuses today. Guests may discuss the presence or absence of diversity on campuses, treatment of people from
marginalized groups, expectations of professors, or other details.

Senior or emeritus faculty members may provide historical details about the context of academia that may surprise students. Students today are often shocked to learn that Muzafar Sherif started his graduate seminars at 7:00 p.m. and did not stop before midnight (W. Viney, personal communication) or that this was appropriate in the 1950s. Additionally, today’s students may also be surprised to learn that Sherif’s students did not publicly complain. Today’s students could evaluate the ways that these pressures may have shaped the processes of psychological research and the experience of being a student.

Conclusions

The materials I have reviewed provide a wide range of methods for increasing student engagement in history and systems of psychology classes. Student engagement is critical for the success of psychology students who are becoming teachers, scholars, and professionals and also for the continuation of the history and systems course in times of competing class requirements, small numbers of dedicated scholars, and intense pressure toward substantial external funding (Chamberlin, 2010; Fuchs & Viney, 2002). Hopefully, these activities can provide teachers of the history of psychology with additional tools to engage students creatively.

References


Peden, B. F., & Woody, W. D. (2000, May). Commemorating notable events in psychology: Some expedient (quick), economical (cheap), and poignant (personal) activities or demonstrations. Presented at the annual meeting of the Midwestern Psychological Association Convention, Chicago, IL.

Reynolds, D. V. (1977). Students who haven't seen a film on sexuality and communication prefer it to a lecture on the history of psychology they haven't heard: Some implications for the university. Teaching of Psychology, 4, 82-83.


Woody, W. D. (2010, April). *Be the famous psychologist*. Presented at the annual meeting of the Rocky Mountain Psychological Association, Greenwood Village, CO.

**Footnotes**

1. One can purchase a length of 3/4-inch steel bar in the electrical section of a hardware store and use a hacksaw and some dedication to cut the bar to the required length of 4 feet. Or, one can find a friend or professional with a hacksaw and the knowledge to use it safely.

2. One can purchase an inexpensive container of foam ear protectors during the same trip to the hardware store.
# Section 4. Abnormal Behavior and Personality

*Susan Burns, Editor*

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Creating Transformative Experiences for Students in Abnormal Psychology

Anton O. Tolman

Utah Valley University

One of the joys of teaching psychology is that the course content can, almost always, directly apply to the lives and experiences of individual students. The high base rate of mental disorders in the population make it likely that most students taking an Abnormal Psychology course have some pre-existing personal awareness of mental disorders. Connor-Greene (2001) described a survey of two Abnormal Psychology courses where 96% of students reported knowing at least one person with a diagnosed psychiatric disorder; the modal number of relationships with persons with a disorder was four, mostly family members. Instructors have the opportunity to build upon this intrinsic motivation to learn by creating opportunities for transformational experiences that facilitate lasting student learning and develop key intellectual skills, but they should be aware that there are also challenges to be overcome.

Chief among potential barriers to learning in an Abnormal Psychology course include pre-existing stereotypes and active stigma towards persons with mental illness. Cultural stereotypes and misconceptions abound (e.g. that Dissociative Identity Disorder and Schizophrenia are the same condition). For example, Wedding, Boyd, and Niemiec (2010) concluded that although some major film releases display sympathetic portrayals of persons with mental illnesses, "many more" do not. In particular, films tend to depict persons with mental illness (especially psychosis) as unpredictable and dangerously violent. These authors also note that films commonly depict mental health professionals as either inept or arrogant and manipulative and that social stigma regarding mental illness is a major cause of relatively lower rates of help seeking by persons who would benefit from mental health treatment.

In 1999, the U.S. Surgeon General released the first report focusing on mental health (U.S. Office of the Surgeon General, 1999). Among many conclusions, the authors noted that despite advances in diagnosis and treatment, the stigma against those with mental illness remained strong, most likely due to a perceived link between violence and mental disorders. Almost certainly, these cultural patterns and influences have shaped, to some degree, what students believe they know about mental illness.

Further, Hardy and Calhoun (1997) evaluated the impact of the "wounded healer" syndrome in abnormal psychology courses, finding that as students learn about mental disorders they become less anxious about the possibility that they, personally, have a mental disorder; unfortunately, they become more worried that a family member has a mental disorder, especially a personality disorder. These authors believe this may be due to a tendency by students to view themselves as "junior clinicians" and to apply nascent diagnostic skills to family members. In order to achieve transformative experiences, effective instructors carefully design their courses to focus on more than just content information regarding diagnosis, treatment, and mental disorders by creating course assignments and activities that challenge these underlying assumptions and barriers to learning; in doing so, instructors will help students gain a factual understanding of content, increase their compassion towards others and enhance students' personal commitment to learning.

Original Exercises, Assignments and Demonstrations

In order to move from an exclusive focus on content or "lecture as usual" towards transformational learning experiences, instructors need to re-evaluate their course objectives. The following are suggestions for essential course objectives for Abnormal Psychology:

- Increase students' understanding of and ability to apply information about mental disorders.
- Improve students' understanding and appreciation for the scientific and professional issues involved in working with individuals with mental disorders.
- Help students accept the reality of stigma, recognize its impact on the lives of people with mental disorders and their families, and their personal ethical responsibility to reduce it.
• Develop students' self-awareness as a learner and recognition of the professional value of metacognitive skills.
• Improve students' essential life skills including oral and written communication (including writing from a scientific and professional perspective).

Taken together, these course objectives are a fair match to the National Conference's definition of "psychological literacy" (see McGovern et al., 2010) within the framework of an abnormal psychology course.

Once an instructor is clear on the course objectives, class activities and course assignments will flow naturally from efforts to achieve those targets. The following are some course activities that can be helpful in achieving the noted objectives.

**Student Understanding and Application of Information About Mental Illness**

**Make reading count by using pre-quizzes.**

Doyle (2008) notes that a major reason that students do not read their text material before coming to class is that they are confident that the instructor will review the chapter material during lecture; instructors view this as saving time and effort on their part, but it can be damaging to the ability to foster active and engaged class discussions. Eliminate this problem by having students take a chapter pre-quiz before class discussion begins on a given topic (e.g., affective disorders). Students will come to class having already completed and thought about the readings and factual material and class time can be spend expanding, exploring, and analyzing the issues involved rather than a recitation of material that exists elsewhere. This strategy is especially effective if the pre-quiz utilizes applied or conceptual questions rather than factual questions. For example, rather than asking a factual question that asks student to identify which diagnosis involves a manic phase, a question could present a scenario of two individuals, one displaying manic behaviors, and one displaying mild dysphoria. The question then asks the student to identify which of these two persons has a stronger genetic contribution to their symptoms. The answer to such a question cannot be simply looked up in the text; it requires the students to analyze the material, recognize that there is a greater genetic contribution to Bipolar than Major Depressive disorder, and to select the best choice. Via Blackboard and other course management software, instructors can enhance the quizzes such as by allowing students to take the quizzes more than once and then averaging their scores or taking the highest one. This approach encourages them to learn from their mistakes and to correct their misunderstandings of content.

**Application Workshops.** Utilize case study material in collaborative team-based assignments. Every week, the class, divided into teams, spends an entire period evaluating a written case study based on material related to the current chapter. These Application Workshops begin by presenting details of the case and then asking students to respond to a set of questions that begin as mostly factual (to orient them to relevant material in the case). After responding to the questions, students then apply, analyze, synthesize, and evaluate information. The workshops increase in complexity as the semester progresses and become vaguer, requiring greater use of critical thinking by students. For instance, later case studies may actually leave out critical information requiring students to identify what crucial information is missing and ask them to evaluate how to assess for the missing information. The teamwork element of the Application Workshops can be facilitated by the use of specific roles (e.g., leader, reporter, recorder, ambassador) that team members take in turn to practice and develop new skills. These workshops increase students' depth of understanding of content material from the chapters, help them differentiate symptoms, and promote critical thinking.

**Jigsaw classroom.** Following the method developed by Aronson (2010), instead of lecturing on material, split the class into impromptu groups with a size appropriate to the material for that day. Give each member of the group a specific area or paradigm in which they need to develop expertise. For example, if the topic was the biopsychosocial model, one could assign one student to become expert on genetic and other biological influences (e.g., head trauma, neurotransmitters), one could be assigned expertise in stress models (e.g., diathesis-stress), one could be assigned to understand psychosocial influences, and one could be assigned to become expert in developmental and cultural factors. Once these assignments are made, introduce a case study to the class that is ambiguous (i.e., multiple etiological factors are evident and need to be explicated). All students should familiarize themselves with the case scenario. Then, split the students up whereby they each meet with an "expert" group consisting of students with the same assignment. Give students sufficient time to discuss the issues involved utilizing their texts, lecture notes, or whatever other materials are available, including organizing questions, etc. After sufficient time, split up the expert groups; students return to their original groups where they are the only real experts in their topic. Each person then shares what they have learned and the group.
discusses etiology or treatment. Finish with each member of the class taking an individual quiz (this promotes interdependence on each other for vital information), or class discussion, or other integrative activity. Instructors could use this activity for both the factual knowledge objective and the objective regarding student understanding of scientific and professional issues.

**Fostering Self-awareness of Stigma Against the Mentally Ill**

**Invite guest speakers.** In most states in the country, instructors can invite pairs of trained speakers who live with mental illness, working as part of the National Alliance on Mental Illness (NAMI, 2010) to present to the class. They share their own life stories, their recovery, carry out a planned presentation, and then answer questions from the class. This type of presentation not only makes the complexity of symptoms and diagnosis and treatment clear to students, it does so in a compelling and human way. These presenters challenge stereotypes about persons diagnosed with these disorders especially via class discussion or when reflective journals are used to ask students to reflect on this experience. Another way to maximize the impact of such a presentation might be to utilize a "what you Know, what you Want to know, and what you Learned" (KWL) exercise or other form of reflective experience, asking students to describe what they expected when they found out the speakers were coming compared with their feelings following the presentation. A principal goal here is to help students identify their own internal stereotypes and stigmas of persons with mental illness and then challenge them.

**Interview Paper Assignment.** By working with local mental health agencies, particularly public agencies, an instructor may be able to solicit patient volunteers willing to speak with students about their lives and experiences, including their own perspectives on diagnosis, assessment, and treatment. Care should be taken to ensure that patients are volunteering for these opportunities, but experience has demonstrated that many patients are interested in speaking to a sympathetic listener who takes an interest in their lives. Similarly, instructors should coach and advise students on how to approach these interviews, usually via class discussion and organizing questions or structure for the interview provided by the instructor. By making the interview part of a term paper, the instructor creates an opportunity for both reflection and critical thinking. Such a paper might require students to summarize the person's life (while respecting confidentiality) and to evaluate the information the patient provides through the lens of course content. Instructors can produce transformative learning by requiring a final section of the paper, written in first person, which asks students to reflect on their own internal stigma, their feelings and apprehensions about the interview, and to evaluate the degree of match between what they feared and what actually happened. Such an assignment regularly produces significant gains in student understanding about how deep their own stereotypes and prejudices about persons with mental disorders run while giving them new information to use in combating the stigma they find around them.

**Critique a Feature Film.** Instructors can assign or allow students the option to write a paper evaluating a commercial film, specifically to raise their awareness of how popular media contributes to stigma. Instructors can develop a list of films that contribute to public confusion or misunderstanding of mental disorders or that promote a biased view of mental disorder (e.g. that persons with mental disorders are inherently violent and dangerous or that mental health professionals are either arrogant or incompetent). Instructors can also turn to resources such as Wedding, et al. (2010) to help construct such a list. Even popular films that portray individuals with mental disorders in a sympathetic light sometimes create confusion for the public. For example, *A Beautiful Mind* (Howard, Grazer, & Howard, 2001) commonly creates confusion and misunderstanding of the differences between hallucinations and delusions and the role of electroconvulsive therapy in the treatment of psychosis; students also often miss or ignore prodromal symptoms that are evident at the beginning of the film. Asking students to critically evaluate such works both in class discussion and in written assignments can improve their awareness of stigma in culture as well as helping develop increased empathy for those with mental disorders.

**Start Clicking with Students.** Similar to Conner-Greene's (2001) use of an in-class survey to help students feel connected to their abnormal psychology class, instructors can utilize student response systems (SRS) or "clickers" as a way to promote student self-reflection and engagement with the material. Clickers are especially useful in abnormal psychology courses because they can collect mostly confidential input from students and provide almost immediate feedback that can help students to be more willing to confront, discuss, and evaluate issues related to stigma. For example, on the first day of class in abnormal psychology, an instructor could ask a series of questions to elicit...
students’ underlying myths and experiences related to mental illness such as the perception that mental illness indicates high risk for violence, the confusion between dissociative identity disorder and schizophrenia, and students’ own personal experiences with diagnosis and treatment. Showing the results immediately following the question, students may help students realize that, contrary to previous beliefs that they were alone in their experiences and deserved to feel shame for their, or their family member’s symptoms, a significant number of their peers may have similar experiences. This realization can be both a liberating and enlightening experience for students and can set a strong foundation for motivation to learn as well as to challenge social stigma.

**Student Self-Awareness as a Learner and Mastery of Effective Learning Methods**

**Encouraging student meta-cognition.**

Promoting students’ self-awareness of their current approach to learning and encouraging them to actively adopt a deep approach to learning by utilizing effective study strategies is an integrative approach in abnormal psychology because it links directly to other course objectives. One cannot truly understand the way a psychologist thinks and evaluates information unless one understands the role of lifelong learning and the need to constantly and effectively update one’s knowledge base through ongoing study. Further, the use of psychological inventories for these purposes can be linked to discussions of assessment, diagnosis, and treatment planning. Several tools exist that can facilitate student development in these areas.

The first tool is the Revised Study Process Questionnaire (R-SPQ; Biggs, Kember, & Leung, 2001), an instrument that provides feedback to students on the degree to which they are approaching learning from a surface or a deep approach. Assign students to complete the R-SPQ early in the semester, quickly check their scoring, and then provide them with norms based on class means and standard deviations and a document to assist students in evaluating their results. This exercise is more effective when instructors ask students to submit a reflection paper about their scores, considering the class norms, discuss a possible “treatment plan” they could use to enhance their own learning, and then reflect on how this process mirrors that used by psychologists with patients. Because this assignment directly involves a student’s personal experience with an assessment tool, class discussions can emphasize issues of reliability, validity, diagnosis, and treatment planning using the R-SPQ as an example. Class discussions could also focus on students’ perceptions of the relative merits of seeking treatment from a professional psychologist who utilized a deep approach to learning throughout their training versus one who adopted a surface approach. Consistent with Doyle’s (2008) observations about motivating and engaging students, such a discussion establishes the links between the students’ own experiences, learning goals, and the value of the assignment to their future lives and careers.

Instructors can utilize another set of instruments to emphasize different aspects of learning effectiveness. Grounded in the Transtheoretical Model of Change (TTM; Prochaska & Norcross, 2009), the TTM Learning Survey (Tolman, Tully, & York, 2009; Tolman, Biggs, & Binks, 2010) asks students to evaluate their readiness to adopt more effective learning strategies, both for solo learning and for working in learning groups. Although the TTM Learning Survey is a new instrument, results from over 700 students from a wide variety of undergraduate classes (both upper and lower division) suggest that it has promise in assessing readiness to adopt effective learning strategies. Tolman, et al. (2010) also described using the TTM Learning Survey in conjunction with a related set of instruments called the Learning Strategies Self-Assessment (LSSA; Tolman, et al., 2010) that utilize both quantitative and qualitative questions to ask students to report and reflect on the frequency of use of well-known effective learning strategies and their own learning goals. As with the R-SPQ, class discussions of these instruments should be embedded within a context specific to abnormal psychology; for example, the TTM Learning Survey is an attitudinal scale whereas the LSSA is a behavioral scale (the quantitative section), and the LSSA demonstrates the value of both quantitative and qualitative measurement. Similarly to the R-SPQ, an assignment asking students to reflect on the meaning their scores and to link their experiences to clinical processes can give them an experiential basis for understanding some issues related to the processes of assessment and diagnosis. Last, because the TTM Learning Survey is grounded in a clinical theory about change and how individuals respond to treatment differentially, there are natural links that could be exploited, particularly when discussing psychotherapy and the treatment of substance disorders, the original field in which the TTM theory was developed (e.g. Prochaska, DiClemente, & Norcross, 1992). Because students will have already considered the issues of readiness to change and their application, this discussion should be more fruitful and personal to them.
**Development of Essential Life and Professional Skills**

**Application workshops as a platform for building communication and team skills.** Application Workshops should also be utilized to assist students in improving their ability to work in teams. Class discussions introducing the workshop assignment should emphasize that learning how to work effectively with others from different backgrounds is a general core professional skill, with special utility in clinical or hospital settings. Even private practitioners work in teams with their administrative staff, referral sources, courts, and others. The instructor should explicitly connect the learning value of teamwork to value offered to patients (e.g. multi-method input and assessment and diagnostic information from a variety of sources tends to produce more accurate diagnoses and can lead to more effective treatment). One way to enhance the effectiveness of the Application Workshops is to ask students in their teams to adopt specific roles such as Team Leader (responsible for getting the assignment done on time), Recorder (summarizes the team's conclusions on the page that will be turned in to the instructor), Reporter (provides a verbal summary of the team's conclusions during the class debriefing), and Ambassador (brings questions from the team to the instructor and conveys answers back to the Team). Requiring students to rotate through these team roles with each workshop not only keeps the students actively involved in the discussions and prevents social loafing, it allows them opportunities to develop skills essential to professional success.

**Annotated Bibliography**

**Student Understanding and Application of Information about Mental Illness**

**Experiential demonstration of symptoms of dissociative identity disorder.** Describes a classroom demonstration that generates temporary symptoms of multiple personality in student volunteers - a very engaged activity. Grounding the classroom experiment in a contextual discussion of differential diagnosis, various theories about the etiology of the condition (including the iatrogenic hypothesis), the use of hypnosis in these cases, and the real-world context of the Kenneth Bianchi (Hillside Strangler) case, the instructor solicits student volunteers from those with elevated scores on a measure of suggestibility and interviews them in class using hypnotic techniques after preparing them to role-play an accused murderer. The author notes that this demonstration should only be performed by persons experienced with hypnosis because it is possible that some students could become hypnotized during the session. Debriefing is very important to ensure that students understand the various controversies surrounding the diagnosis and can develop an informed opinion.


**Demonstrating symptoms of schizophrenia.** In this activity, the instructor engages in the use of an apparently spontaneous monologue reflective of the disordered thought processes in schizophrenia. (The monologue is actually planned in advance). Following the monologue, the instructor asks students to explain their emotional reactions, describe their thoughts during the monologue, and clarifies diagnostic issues (such as the distinction between schizophrenia and multiple personalities). The instructor also promotes discussion of the potential symbolic meaning of delusional material, the person’s emotional reactions to their own symptoms, and the reactions of others to the symptoms. This exercise provides not only an opportunity for improving student comprehension of schizophrenia, but a chance to address issues of stigma and the social treatment of persons with psychotic conditions.


**Understanding mental illness through poetry.** Describes a written assignment to promote student understanding of mental illness as well as to increase student empathy towards those who are affected. The author asks students to write a poem about “the experience of mental illness” (p.73) without restrictions on subject, length, or perspective (first- and second-person perspectives are permitted). She notes that although they often appear initially shocked by the assignment, most students end up producing high quality work. Chrisler also states that grading criteria for the assignment include that the poem must convey a solid understanding of the symptoms of a specific disorder or general psychiatric state (e.g. anxiety) as it would be experienced by a person.

- Chrisler, J. C. (2000a). Exploring mental illness through a poetry-writing assignment. In M. E. Ware & D. E. Johnson (Eds). *Handbook of*
Increasing understanding of suicide and risk factors. As the authors note, suicide is an important topic in abnormal psychology and often does not receive sufficient attention in texts. In conjunction with lectures related to depression and suicide, the authors ask students to complete the Revised Facts on Suicide Quiz (RFOS). They also provide students with a list of resources related to suicide prevention and discuss warning signs that students should watch for. After the quiz is scored, the instructor leads a discussion of the items that were missed by significant percentages of the class. They note that students have also expressed that the quiz is useful as a study guide or handout. By identifying those areas in which students have misunderstandings or misconceptions regarding suicide, the instructor has the opportunity to provide updated information and to foster improved understanding of this important topic.


Demonstration of in vivo participant modeling. As part of a class unit helping students understand behavioral treatment modalities, the author utilized a wildlife expert as a guest speaker. This exercise would also be very useful in a discussion regarding anxiety disorders. Approximately one week prior to the guest’s visit, the instructor asked students to complete a questionnaire related to fear of snakes. Subsequently, the guest speaker brought with him a live non-poisonous snake to class and described snakes. He brought the snake out to show the class; those students who had indicated they were fearful of snakes were asked to approach and interact with the snake in a systematic way, following behavioral principles and modeling by the guest. Results of a post-activity survey found that students generally found the activity interesting and helpful. The instructor reported that this exercise is most helpful if accompanied by class discussion about the difficulty in identifying the change mechanisms involved in helping the fearful students interact with the snake, and whether or not the results are generalizable. Because the instructor’s husband was the expert model, others may find this activity more difficult to implement, but she suggests approaching colleagues in a Biology department, contacting local zoos, nature centers or pet stores for potential partners in this activity. As an alternative, the DVD accompanying Durand and Barlow’s (2010) abnormal psychology text contains many useful short videos, one of which demonstrates the use of in vivo exposure to treat a snake phobia.


Demonstration of in vivo systematic desensitization. Noting that teaching students about systematic desensitization can be difficult to do in vivo, due to the repeated nature of sessions over time, the authors describe an in-class demonstration that is humorous and gains student attention. Prior to the class where the demonstration will be used, the instructor approached a student who typically sat at the back of the classroom and asked them to participate. The instructor then told the class that he had been working with the student who had an eraser phobia and thus avoided sitting near the front of the class. The steps of systematic desensitization were demonstrated with gradually increasing exposure to the feared eraser. The authors found that students generally reacted positively to the demonstration and reported that it was helpful to them in understanding the principles involved. They note the importance of grounding the demonstration in a discussion of the nature of anxiety disorders, the complexity involved in real-world desensitization treatment, and the related ethical principles involved (e.g., instructors do not conduct therapy with their students due to dual roles). They also describe some variations on the demonstration that might make it more effective. In addition to those described, instructors could involve students in helping to elaborate the steps of the hierarchy, which would engage them more actively in thinking through the method.


Student Understanding of Scientific and Professional Issues

Illustrating the role of paradigms in the etiology of mental disorders. In order to assist students in comprehending the role that paradigms play in understanding the etiology of mental disorders and the selection of treatment modalities, the author presented students with an ambiguous case...
study. She asks the students to explain the etiological issues that lead to the client's problems and to describe what treatment they would suggest. (Such an activity could be easily incorporated into an Application Workshop assignment as described above and might have more impact due to the more intensive small-group interactions). After eliciting student input on the questions, the instructor asked the students to classify their answers according to the major paradigms used in the course (e.g., psychological, social, etc.). Most useful, she asked the students to then evaluate why some paradigms were avoided, for example, the possibility that the client's behaviors were due to organic causes. She also asked the students to evaluate whether or not the causes they ascribed to the patient's behaviors matched up with the treatment modalities they recommended. She also pointed out to students that they did not suggest etiological factors that were historical (e.g., the symptoms were due to demonic possession) and asks them to discuss the meaning of this fact. This class discussion makes the exercise quite useful, especially if similar exercises were to be repeated across the semester.


Developing students' ability to form effective questions. To encourage the development of students' questioning (and thus critical thinking skills) the instructors integrated readings from a supplemental text by Keeley (1995) into their Abnormal Psychology course plan. They also utilized reading assignments for every text chapter, asking students to develop questions in such areas as the underlying questions being answered by the text, the theories or approaches being utilized, and making use of sentence stems as a scaffolding technique to encourage student development of evaluative questions. The instructor also provided specific instruction and feedback to students on how to generate effective questions. This exercise would be most useful in abnormal psychology if instructors explicitly linked and discussed with students the role of effective questions in research involving psychopathology, clinical assessment, treatment outcome evaluation, and real-life evaluation of controversial issues facing the field (e.g. the effectiveness of antidepressant medications).


Understanding theoretical perspectives through the use of literary case studies. Describes an approach to help students understand the connection between theory and empirical data. The instructor employs a writing assignment where students select a figure from history, the arts, or current events and analyze that individual's behaviors utilizing a single theoretical perspective from the mental health field (e.g., psychoanalysis, medical model, behaviorism) based on biographical data and to recommend a treatment plan consistent with the theory utilized. He notes that such an assignment is difficult for students and recommends using a draft with revision. He notes this assignment is useful in helping students realize that any single perspective is inadequate to understand the complexity of human behavior and that different theories may have utility in different areas (e.g. to understand the etiology of behaviors, but not necessarily to treat them).


A collaborative approach to analyzing case studies. Another approach to helping students understand the use of paradigms in abnormal psychology utilized collaborative teams. The authors described a case-conference method in which each team was assigned to become expert in a particular paradigm in psychopathology (e.g. cognitive, psychodynamic). Subsequently, each team was asked to analyze the same case study; the authors provided sufficient historical information to enable students to utilize the paradigm they had studied. Each team was asked to respond to four guiding questions that focused on problem identification, etiology, recommended treatments, and assessment of outcomes. During class discussion each team presented their findings and identified disagreements or conflicts with the previous paradigms, similar to a clinical case conference where professionals of different background present their view and perspectives on the patient. The authors presented preliminary data suggesting that this approach resulted in improvement of students' understanding of these major paradigms and recognition of how theory shapes the interpretation of patient data and professional conclusions. Such an exercise could potentially be even more effective if instructors asked students to integrate the findings or to reach a class-wide resolution on how to proceed with the patient, similar to real-world practice. Such an extension of the exercise could help students understand the
dilemmas facing clinical teams who must not only analyze clinical realities, but respond to them.


**An unconventional approach to teaching paradigms.** Explaining that most texts in abnormal psychology focus on a small set of theoretical perspectives or paradigms, the author describes another approach to helping students understand the role and impact of theory. He does this by asking students to read a book and then write a term paper in which they evaluate an “unconventional” perspective such as the anti-psychiatry position, labeling and role theories, feminist theory, etc. The assignment requires students to evaluate the soundness of evidence marshaled by the author, how well the author deals with opposing points of view and to give their own conclusion. He also permits two drafts of this paper which allows students to learn from feedback, a process he indicates usually results in improved understanding of historical context, better critical thinking, and a broader understanding of the multiple ways to view human experience. This exercise has the benefit of expanding student awareness of alternative, non-mainstream critiques of the field as well as promoting scientific skepticism and critical thinking.


**Fostering Self-awareness of Stigma Against the Mentally Ill**

Utilizing literary case studies to promote student empathy and writing skills. Although she utilizes similar materials to some others described above, one instructor focuses on a different target - understanding and developing empathy for persons who struggle with mental disorders as well as improvement in student writing skills. She advocates the use of literary works focusing on characters with various types of mental disorders as case-study material to achieve these ends. In her assignment, she asks students to select a book from a list of novels, biographies, and autobiographies and to write a paper using a set of organizing questions focusing on key aspects of diagnosis and treatment. She notes that because many of the books are older, they do not fit well with current diagnostic systems and require students to think more broadly. She notes that the assignment gives students a better understanding of the impact of these disorders on someone’s life beyond what is found in textbooks and that the assignment promotes increased empathy, possibly because characters in novels may be more vividly and sympathetically drawn than those typically utilized in case-study materials.


**Building empathy via experiential learning with disabilities.** Describes a set of strategies for providing students with the experience of a temporary disability through the use of equipment to simulate a disability for a day (e.g. a visual or auditory or motor disability), or in-class activities that simulate the emotional impact of childhood disorders or learning disabilities. They also utilized guest speakers who would be willing to share their experiences (e.g., a family member whose relative committed suicide). Many of these activities involved the use of specialized equipment or methods that might be difficult to duplicate, but the authors indicated that they worked with their institution’s student affairs division and accessibility or disability services for assistance. Equipment such as this might also be obtained through the use of internal or external funding grants. These authors noted students expressed an increased sense of frustration, awkwardness, and isolation during the simulations and activities and described being more socially isolated by others. By the conclusion of the activity, most participants indicated increased sense of empathy and compassion for those with disabilities.


**Development of essential life and professional skills**

Promoting writing skills while building content knowledge. Focusing a class assignment on building student writing skills, a lifelong and professional core intellectual skill, an instructor can nevertheless also help students understand content. The author used formative feedback and paper revisions to promote student improvement in writing while emphasizing the distinction between idiographic and nomothetic
approaches to psychopathology. She asked students to complete two writing assignments, one focusing on analysis of a case study chosen from a list of books by the student, and one focusing on a research proposal based on a set of published articles. The research article assignment emphasized use of APA format whereas the case-study paper was a reaction paper. She discussed the reports in class and scheduled individual appointments with students to discuss their research proposals. She also provided detailed feedback to students on their first draft of each assignment and allowed revisions. She noted that students reported that the assignments were useful, but they found the research proposal assignment more effective overall in developing their interest in the field of psychology.


Concluding Remarks

Given the importance of the overall goal of developing "psychologically literate citizens" (McGovern et al., 2010) as the core of undergraduate education in psychology and the critical nature of developing students' core intellectual and practical skills (e.g., oral and written communication, quantitative reasoning, etc.) for future success in graduate studies, I was somewhat dismayed at how relatively little literature exists on developing these types of course objectives in abnormal psychology. Further, there was very little evidence of studies focusing on promoting meta-cognition of student learning approaches and relatively little on combating stigma. Articles addressing these issues do exist in the teaching of psychology literature and in the general pedagogical literature, but it would be very helpful to find more specific examples or suggestions of how to address these course objectives in specific classes like abnormal psychology.

Every psychologist teaching at an undergraduate or high school level might benefit from careful study of the proposed core principles at the heart of undergraduate education in psychology (Halpern, 2010) and seek to develop, and share, their experiences and knowledge.

References


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Health Psychology

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The discipline of health psychology examines biological, psychological, and social factors in physical health and illness. Course topics typically include discussions of health promotion and illness prevention, psychosocial factors in health behavior, utilization of the health-care system, physiological systems, stress and illness, pain, coping, and issues related to specific health conditions. Both research and application are emphasized. As such, the field of health psychology examines biopsychosocial connections through collaboration with and input from multiple specialty areas within psychology. This intra-disciplinary focus allows for many opportunities to incorporate engaging learning activities, as well as the capability to tailor activities from other content areas to health-related domains.

Original Exercise/Demonstration

Biopsychosocial Interpretations of Mortality Rate Differences between Groups

This activity is useful for introducing the need for a biopsychosocial approach to understanding health and illness using what initially seems to be an obviously biological event: mortality rates. The website for the National Vital Statistics System of the Centers for Disease Control and Prevention (http://www.cdc.gov/nchs_nvss.htm) contains many documents useful for illustrating concepts in health psychology. In the first few days of the course, I print copies of selected tables presenting data on mortality rates according to age, sex, race, and geographic region. Each student in class receives a different table, and is asked to interpret and share the information in their table with the class. Students are often quite surprised to discover variations in death rates across different groups. Students then brainstorm possible explanations for these differences, which are then discussed in terms of biological, psychological, and social influences. This activity highlights the limitations of the traditional biomedical model of disease, and the need for understanding biopsychosocial factors in health and disease.


Annotated Bibliography

Methods & Critical Thinking—Introducing Health Psychology

A group activity designed to promote students’ critical thinking, specifically regarding “psychological myths,” with an emphasis on providing students with the tools needed to evaluate such beliefs. Students are taught to use reliable and valid library and internet resources to research the empirical evidence regarding a topic area. The authors report improvement on pre-post assessments of critical thinking, and student evaluations of the activity as useful and worthwhile. Students can assess personal beliefs regarding health or claims in the media regarding health issues (e.g., herbal supplements to improve memory, the impact of particular diets on health, stress as a sign of personal weakness).


Evaluating Media Reports of Health Research

This article presents an activity designed to enhance students’ understanding of and appreciation for research. In this activity, students are presented with a media report of psychological research, and the original research article on which it was based. The authors report increased understanding of the role of research and the limitations of media reports. An appendix includes worksheets to help guide students in their evaluations and comparisons of the media report and the journal article. This exercise is particularly useful when tailored for the evaluation of health-related product claims and reports of health-related research in the media, both of which are often oversimplified and sensationalized. I have found that this activity increases students’ awareness of media bias in the health field, improves their critical thinking, and increases their skill in using library and database resources.

**Experimental Methods & the Mind-Body Relationship**

Describes an activity used to illustrate the experimental method, in which heart rate is measured after alternating periods of resting, reading a violent story, and running in place. Provides a good demonstration of the elements of experimental design, as well as allowing for a discussion of the relationship between the mind and body, including individual variation in responding.


**Health Behaviors: Approach & Avoidance Conflicts**

This activity demonstrates the difficulty in making avoidance decisions by having students time one another’s responses to a series of approach and avoidance choices. Many health behaviors are perceived in terms of loss, e.g., giving up smoking, not eating, taking time away from pleasurable activities to work out. Stimuli can be modified to reflect health-relevant behaviors. Results can be used for class discussion on “behavior traps,” as well as ways to effectively promote health behaviors.


**Stress & Coping: Student Worries**

This in-class activity allows students to examine worry as an aspect of stress, and to create a “personal worry profile.” The Worries Survey contains items pertaining to typical college students’ concerns. Normative data is provided. This activity allows for both self-analysis, and class discussion of stress and coping in ways that directly relate to students. Additional measures of health and adjustment may be used in conjunction with this scale.


**Emotional Stress and ANS Activation**

A specific illustration of the measurement of autonomic nervous system arousal (heart rate), and its relationship to emotional stress. Students are asked to write (confidentially) essays concerning a personally stressful event, and pairs of students assume the experimenter and participant roles. Baseline, arousal, and recovery periods are assessed. The author reports that this activity has been reliable, and HR provides a sensitive measure showing clear changes over the course of the activity. Discussion can include data analysis procedures, as well as further discussion of the activity of the autonomic nervous system.


**Meditation Exercise & Assessment**

This article presents an activity that allows demonstration and discussion of meditation, specifically integrating a scientific perspective with this “mystical” alteration of consciousness. A brief meditation exercise is presented, along with references for alternative exercises. This activity allows for an examination of the relationship between meditation and its effects on physiology, as well as subjective experience.


**Addiction**

A unique, first-hand demonstration of the biological, psychological, and social factors involved in addiction. Students role-play being an “ice-cube addict” for 2 days. Includes a handout detailing instructions to students. Student reports indicate this is a powerful activity with positive learning outcomes.

The Impact of Chronic Illness

Students often experience unrealistic optimism when evaluating their susceptibility to health problems, when in reality most will have to eventually cope with a chronic illness. This exercise helps to make students more mindful of the issues that people with chronic illness have to face. Includes questions to help focus students on issues experienced by those with a particular condition (e.g., changes in daily activities, physical environment, relationships and social support).


Behavior Change & the Single-Case Design

Focuses on research methodology in the context of a personalized behavior change project. The author found that most students chose health-relevant behaviors (e.g., exercise, eating habits) for their project. Students learn issues in data collection, analysis, charting, and interpretation, and showed significant improvement in their knowledge of this type of design.


Personal Health Profile

In this Instructor’s Manual, each chapter’s suggested activities include an activity relevant to the development of a student health profile. This profile, developed over a semester’s course, includes an examination of personal health-related behaviors, a literature review, and ideas for personal change. Each activity relates clearly to issues in personal health, and to the topics included in each chapter of the textbook.


Stress & Pain Management

A workbook developed to help chronic pain patients reduce pain and improve coping strategies. Much of this book can be used in conjunction with a health psychology text to illustrate specific issues in pain and stress, as well as provide compelling examples of the mind-body relationship. Most self-assessments and activities in this book can be used in conjunction with class discussion, particularly on stress and coping (e.g., relaxation response, time management, automatic thoughts and cognitive restructuring, health attitudes, setting goals and problem solving).


Community Fieldwork

Describes a study in which students were required to develop, implement, and assess an intervention/prevention program in a pediatric population. Programs included adherence to medical regimens and pain management. Results, including data from students and the community, were positive. Suggestions for activity implementation are included.


General Resource

This article describes and provides resources for a variety of activities and materials for teaching a combined lecture-lab course in health psychology. Includes ideas for and descriptions of activities such as scrapbooking, library research, a “Health Pursuit” game, site visits, and personal health plans and stress appraisals. Students reported many of these activities to be interesting and important.


General Resource

This workbook contains descriptions of many activities, and includes worksheets to guide students through each topic. Each activity begins and ends with students recording their beliefs and knowledge regarding the topic. Activities include self-assessments (e.g., parental influences on health beliefs and behaviors, stress evaluations and coping strategies, personal risk) and interviews and surveys (e.g., self-health checks, immigrants and acculturation). Specific topics addressed by activities include religion and health, alcohol and tobacco use, patient-practitioner interaction and racial identity, and issues in chronic illness.


Validated Scales on the Internet

Many assessment scales relevant to topics in health psychology are available on the internet. Students often enjoy taking, scoring, and critiquing these psychological tests. Data may be aggregated by class, and the results discussed in the context of
methodology, test construction, and predictive validity.

**Social Readjustment Rating Scale (SRRS)**
This Wikipedia reference contains both adult and non-adult scales, and empirical references.

**Multidimensional Health Locus of Control (MHLC) Scales.** Ken Wallston’s MHLC scales are provided, along with FAQs and a bibliography. Also included is a link to the God Locus of Health Control (GLHC) Scale.

**Scales of Subjective Well-Being.** Ed Diener’s collection of scales includes the Satisfaction with Life Scale (SWLS), Scale of Positive and Negative Experience (SPANE), and the Flourishing Scale (FS). Reprints of research articles are available from this site on request.

**Positive Psychology Center Questionnaires.** Several scales listed have been found to predict physical health. Research references are listed.

**Toolkit of Instruments to Measure End-of-Life Care (TIME).** This website developed by the Center for Gerontology and Health Care Research, Brown Medical School, provides an extensive listing of measures designed to address issues such as pain, functional status, and grief and bereavement. Many scales can be accessed directly from the website.

**Websites for Illness Related Organizations.** This list, compiled as a student resource by Wiley Higher Education, can be used as a resource for multiple class activities. Assignments can include having students go to these sites to learn more about a particular condition, prevention and treatment, and professional and community resources.
Engaging Students in Clinical Psychology Courses

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Engaged students are active learners who are more willing to learn course material, able to apply concepts and make them relevant, and likely to have fun (Halonen, Brewer, Bell, & Miller, 2008; Kuther, 2003). Nonetheless, the strategies that faculty use to engage freshmen non-majors are very different than those used with upper level students, where there is less need to engage them, but a greater need to keep them engaged, expand their interest, and focus their engagement in particular ways (Harackiewicz, Durik, Barron, Linnenbrink-Garcia, & Tauer, 2008). Presumably, engagement in later courses would focus higher on Bloom’s (1984) taxonomy, emphasizing to greater degrees tasks like application, analysis, synthesis, and evaluation.

These issues are very relevant to engaging students in Clinical Psychology courses. Many students enter psychology wanting to work in one of the helping fields. Although it is unclear what psychology majors’ earliest interests are, more than 50% of students entering either a masters or doctoral program are accepted into programs in one of the human services fields (e.g., clinical, counseling, graduate school, community, health, or school; Norcross, Kohout, & Wicherski, 2005). Furthermore, in my survey of clinical courses in the 14 schools in the State System of Higher Education in Pennsylvania, almost all clinically-related courses were at the advanced level (300/400). Given the previous discussion, relative to a General Education course early in the curriculum, the engagement goal for clinical courses is not so much one of gaining students’ interest, but that of keeping them engaged, while simultaneously expanding and focusing their interests (Harackiewicz et al., 2008).

Although there are Instructor’s Manuals written for a number of clinical psychology texts, relative to other areas of undergraduate psychology, there is little research on the outcomes of teaching exercises and strategies. This failure to write about teaching clinical psychology can be seen at Project Syllabus, an on-line compendium of syllabi supported by the Office of Teaching Resources in Psychology. Project Syllabus lists only two Theories of Psychotherapy courses and two Counseling Skills courses. Contrast this with the seven Cognitive Psychology courses, five Lifespan Developmental Psychology courses, and seven Psychology of Women or Psychology of Gender courses posted at Project Syllabus. This relative neglect is also seen in a review of past issues of Teaching of Psychology. As a result, the following exercise and annotated bibliography present suggestions that are presumed rather than proven to increase student engagement. Approaches for engaging clinical psychology students are grouped into four content areas in the annotated bibliography: (a) theories of psychotherapy, (b) treatment processes; (c) understanding clients and their experiences in therapy; and (d) student’s self as contributor to the therapy process.

Original Exercise

Students often have unrealistic and inaccurate beliefs about both psychologists and their clients. Further, their perception of clinical interventions is often simple and stereotyped. The HBO series, In treatment (Tishby & Barclay, 2008-2010), offers a rich source of material for faculty teaching clinical psychology courses and can be used to help students develop more realistic pictures of clients, psychologists, and psychological interventions. In treatment follows the life and work of Paul Weston, a clinical psychologist in private practice. The series shows Dr. Weston’s work with four clients and his own personal psychotherapy in five half-hour segments per week. Dr. Weston is a gifted listener and a caring man, but also has a number of struggles that compromise his ability to be effective (e.g., he wants to be “helpful” and meet his clients’ expressed needs, and has difficulty working within standard therapeutic boundaries). As he is both gifted and seriously flawed, and the series follows Dr. Weston’s work with these same four clients over the course of the season, In Treatment provides an unusually nuanced view of the process of psychotherapy. Unlike other fictional representations of psychotherapy, Dr. Weston is not perfect, perfectly foolish, or manipulative and self-serving. Psychotherapy is not portrayed as simple and straightforward, but as a struggle between two
engaged parties (and sometimes also as a struggle for engagement).

Because this series offers no easy answers, clips and occasional stories from the show can serve as excellent jumping-off points for discussions. I have successfully used some of the following in class. Episodes are identified by client, season, and week.

- **Assessing a psychosocial history.** April (2/1) is very defended and verbally-non-disclosing in her first session, making gathering a psychosocial history difficult. I interrupt this video right before his summarization, asking the class what they know or hypothesize about her, and then show his summarization and her reaction to it.

- **Empathy.** Walter (2/6) well-described the impact of feeling heard and understood (as compared to his experience in the hospital), which can foster a discussion of the impact of empathy on the therapeutic relationship. Dr. Weston then skillfully questioned why Walter was giving him such positive feedback at this point. These two segments can be used to discuss accurate empathy and additive empathy, as well as strategies for giving negative feedback effectively.

- **Caretaking vs. empowerment.** Dr. Weston (Gina 2/6) struggled with wanting to meet his clients’ overtly-expressed needs (probably a function of family of origin issues). Dr. Weston and his psychologist struggle about whether this is effective and helpful, which the class can also discuss.

- **Boundary crossings and violations.** Dr. Weston engages in a variety of behaviors that are at least boundary crossings (April 2/4 and Sophie 1/5), although sometimes significantly more dangerous (Laura 1/9). The unanticipated consequences of such a boundary crossing are also seen when April (2/5) feels that she overwhelmed Dr. Weston when he misses an appointment because his father died in the week after he took April for cancer treatment.

- **Handling termination.** Laura (1/5) proposed to end therapy because she was obsessing about Dr. Weston; he responded briefly to her concerns, and then changed the subject to something ultimately leading to a disclosure of sexual abuse. Students can evaluate the effectiveness of his actions and how they can be handled more effectively.

- **Responding to transference and countertransference.** Laura (1/5) attempted to get Dr. Weston to tell her that he loved her, although her own feelings apparently stemmed from her feelings about her father and also her father’s friend who had “made love” to her when she was a teenager. Dr. Weston’s reactions to her disclosures and to her request to terminate therapy were somewhat messy due to his countertransferential feelings. Dr. Weston (Gina 2/6) is provocative with his therapist, eventually provoking an outburst from her (which she handles effectively later in that session). Students can be asked to consider these psychologists’ responses.

- **Assessing suicidal ideation** (Alex 1/5, Sophie 1/5, Oliver 2/6, and Gina 2/6). Students can apply knowledge about predictors of suicide to assess these clients’ level of suicidality, and evaluate how Dr. Weston and Gina handled these assessments.

- **Psychologist self-care.** Dr. Weston wanted to start an affair with Laura (discussed in Gina 1/4). Students can be asked to consider how his marital problems influenced his clinical decision-making, and to consider how he should handle his clinical practice under such conditions.

Students reported enjoying discussions about this series. They wanted to know more about Dr. Weston and his clients and extended class discussions by watching the series outside class time. They explored these people and situations in complicated ways, resisting easy answers.

**Annotated Bibliography**

*Theories of Psychotherapy*

- **Psychoanalytic view of personality structure.** In role as the id, ego, or superego, groups of students respond aloud to seeing an attractive person pass by. A discussion ensues about each structure’s responders, the implications of the relative “loudness” of different structures, and the role that defense mechanisms play in resolving conflicts between structures. Students evaluating this exercise reported enjoying the demonstration and understanding psychoanalytic theory better. Pre/post quizzes on the day of the demonstration showed a significant improvement in student performance. This exercise could be performed either with the group as a whole or with small groups, with individual members taking each role. Segrist also provided nonheteronormative examples, as well as those that would not be problematic for students with a history of sexual assault.


- **Demonstration of in vivo systematic desensitization.** Faculty can demonstrate in vivo systematic desensitization of an “eraser phobia” using a student confederate and a pre-developed anxiety hierarchy, starting low on the hierarchy (a caged eraser) and moving to progressively more challenging stimuli (removing the eraser from the cage). Students reported that this demonstration was both enjoyable and increased their understanding of the material. Lawson and Reardon reported that this demonstration might be even more effective for
advanced students if the confederate developed the anxiety hierarchy with the faculty member and if they reported subjective units of distress as they progressed up the hierarchy.


**Family therapy simulation.** Banyard and Fernald described a strategy to help faculty perform a simulated family therapy session in class, as well as five questions that the class could use to structure their viewing of the session (e.g., identify session stages, define the problem, and describe family structure and roles). Students enjoyed the simulation, found it an effective instructional technique, and believed that family roles and structure were well illustrated.


**Learning feminist theory.** Bogart described five tenets, modified from Gergen’s (1988) tenets of feminist research methods, that she uses to teach feminist psychotherapy (e.g., the counselor and client are interdependent, occur in and should be understood in their contexts, and are influenced by their values). Although she does not provide outcome data supporting these tenets, she does provide examples of ways that they can be applied to encourage students to engage ideas and view their work and clients in different ways (e.g., remembering a significant childhood memory and considering how it might be retold differently to a best friend, a parent, a stranger, and a therapist).


**Comparing psychotherapy approaches using videotaped demonstrations.** Authors chose four 8-min segments of video tape of psychotherapy demonstrations: three from the classic Gloria films of Carl Rogers, Fritz Perls, and Albert Ellis (Shostrom, 1965) and Laura Brown’s demonstration of feminist therapy (VandenBos & Broderson, 1994). They encourage students to consider how Brown might respond to Gloria and how Rogers, Perls, and Ellis might respond to Ellen (the client in the Brown video). Further, they asked students to consider the roles of clients, therapists, therapeutic approaches, and the historical context in influencing what happened in session. Students rated the videos as helpful in increasing their understanding of the theories and believed that the comparison of these videos helped them better understand feminist theory.


**Using memoirs to develop case conceptualizations.** Students read a memoir of a person describing psychological problems and performed a case conceptualization of the person from a theoretical stance other than that used in the book (if one was used), then described the therapeutic process for that theoretical approach.


**Evaluating psychotherapy interviews.** Psychotherapy videos are easily available and useful for helping students recognize the differences among therapeutic approaches and how theory is applied. Videos can be discussed and evaluated in several ways: (a) their personal reactions, (b) how the client responds to the therapist (e.g., expanding on ideas or shutting down), (c) student ratings of warmth, empathy, directiveness, etc., and (d) degree of empathy. Rating scales are provided for (c) and (d).


**The Psychotherapy and Treatment Processes**

**Community service projects.** Authors described community service projects designed to help students apply what they learned in class (e.g., volunteering at day care centers). Students reported high levels of satisfaction, greater understanding of course material, better integration of course material to real-world setting, and help in shaping their goals for the future. Community members reported high levels of satisfaction with students’ work.


**Checklist to assess psychotherapy outcomes.** Provides an eight-question checklist of guidelines to help students identify well-designed psychotherapy outcome studies (e.g., identify type of control group,
participants’ expectations across groups, degree of treatment fidelity, length of treatment). The author argued that its brevity allows students to identify the key strengths and weaknesses of outcome studies and could be used in undergraduate and graduate classes to evaluate media reports, discuss research in class, and structure take-home assignments or essay exams. Students reported that the checklist was complete, useful, and enhanced their understanding of outcome research. The author observed that professionals practicing in the field could also use the checklist.


**Assessing risk factors for suicide.** The authors presented students with four case examples with risk and protective factors for suicide and asked students to rank order the cases by risk. Students perceived the activity as useful, as helping them assess risk factors in their own and other students’ lives, increasing their empathy for people who are suicidal, and strengthening their confidence in their ability to accurately identify people who are at-risk of suicide. On pre/post measures of learning, students participating in this exercise were significantly more able to identify the most serious risk factors for suicide and, on a later exam, to accurately rank order the risk of suicide for these cases relative to students who were absent on the day of the intervention.


**Evaluating media “psychologists.”** Students listen to Dr. Laura, Dr. Phil or other popular “psychologists” on TV or radio, then are asked to consider whether they were effective and, if so, what made them effective. Further, the behavior and interventions of these psychologists are compared to their own goals and opinions in order to carefully focus on understanding and attending to the other person’s perspective. They were encouraged to resist impulses to respond by debating, correcting factual errors, problem-solving, etc., behaviors that get in the way of listening and reflecting. Students prepared for the interview, demonstrated attending behavior and basic listening skills, and developed basic


**Bad listening I.** Students find photos of good or bad listening styles, which can be posted on a bulletin board or become part of a PowerPoint show. These photos demonstrate the range of good and bad nonverbal listening styles that can be observed, the range of reactions students have to each, and the role of culture and context in influencing reactions.


**Bad listening II.** In pairs or trios (Client, Therapist, and Observer), students can practice for between one and three min a series of poor listening strategies (e.g., avoiding eye contact, changing the subject, fiddling with an object, making off-track comments). Faculty should encourage students to debrief after each demonstration. Students may have disparate responses, which can lead to interesting discussions.


**Practicing microskills.** Slattery described several strategies for helping students develop counseling microskills. Faculty can put students in a circle, tell a story, and have students (a) respond with microskills, which should be identified, or (b) paraphrase what the faculty member said, with the faculty member continuing the story only once the student has successfully paraphrased what has been said.

Students can also work in groups of two or three as Client, Listener, and Observer, and practice using a series of closed questions, open questions, or reflections of feeling, all parties debriefing after each exercise. In doing so, students explore each microskill’s function and recognize the effect of overshining one microskill.


**Microskills interview.** Students found someone who was willing to let them tape an interview on a topic of their choosing. They were asked to put aside their own goals and opinions in order to carefully focus on understanding and attending to the other person’s perspective. They were encouraged to resist impulses to respond by debating, correcting factual errors, problem-solving, etc., behaviors that get in the way of listening and reflecting. Students prepared for the interview, demonstrated attending behavior and basic listening skills, and developed basic
understanding and rapport-building skills.


**Multicultural interview.** Students conducted a multicultural interview with a student volunteer (protocol available from Raval), wrote and described the interview in the format provided, and submitted it to the instructor. They discussed their experience and what they learned in structured time during class.


**Understanding Clients**

**Psychmovies.com.** By its own account, Psychmovies.com includes hundreds of films. Films are primarily divided by psychiatric disorder, although other categories are also present. Cannon briefly annotates each film with issues that could be considered in class. Suggested films vary in their accuracy, which she argues, can be a strength as students can learn just as much or more from bad depictions or unethical work. Cannon also includes a number of ancillary materials to facilitate the use of films in class. These include a syllabus for a Psychology in Film course, movie ratings from faculty visitors to the Psychmovies site (i.e., best and worst depictions of mental illness and psychotherapy), and student ratings of the educational and entertainment value of films.


**There is recovery.** In 1973, when Sherwin Nuland was severely depressed, and losing his marriage and career because of his profound inability to function, Dr. Nuland was hospitalized. The hospital’s staff considered prefrontal lobotomy as the only remaining treatment available to him. They eventually attempted electroshock therapy, which he believes saved his life. His is a story of second chances. He gave this Ted talk to break the stereotypes about him as someone who has been committed to change in treatment.


**I am...** Faculty should ask students to respond to the question, “Who am I?” in as many ways as they can, then rank order the five roles or perspectives that are most important for them. If they are comfortable, students can put these on the board to structure a discussion about people’s multiple cultural identities, how disclosed identities might be influenced by the context of the class setting, and how disclosed and undisclosed identities might influence treatment.


**A level playing field?** Faculty should ask students to line up shoulder to shoulder at one end of a large room. Students respond to a series of directives (e.g., “People who attended a private school, take one step forward”), with the goal of being the first to cross the room. This exercise (described in Pedersen, Crethar, & Carlson, 2008, although of unclear origin) can help students recognize the roles of privilege and oppression in their lives and those of their clients.


**Taking multiple perspectives in case conceptualizations.** Andrea Yates was, on the one hand, a model parent who homeschooled her children, baked complicated birthday cakes for them, and shared her son’s love of butterflies, and, on the other hand, drowned her young children. Students often have difficulty empathizing with her, yet Slattery suggests empathy for Ms. Yates is possible. In a series of projects over the course of the semester, students work with case material for Ms. Yates, initially considering ways of conceptualizing her and how these case conceptualizations might impact the therapeutic relationship. In later assignments, students perform a psychosocial history, develop treatment goals, and write a treatment plan for Ms. Yates. Students report developing a new perspective and empathy for Ms. Yates and other clients, recognize the role of empathy in building therapeutic relationships, and identify strategies for developing treatment plans that will engage clients and help them commit to change in treatment.

The Student’s Self as Contribution to the Psychotherapy Process

Journaling to examine views of culture in psychotherapy. Students examine the effect of course material on their assumptions and knowledge about the role of culture, their work with clients, and interactions with people from different cultural groups (e.g., race, ethnicity, social class, religion, sexual orientation). At least 15 responses were required: ten prescribed (e.g., three in response to in-class films, one in response to another class project, and arguments in favor of and opposition to two statements), and five free choice.


Ethics autobiography. Students wrote their ethics autobiography to “consider how their own personal values, backgrounds, and traditions may interact or conflict with professional ethics principles and rules in psychology” (Bashe, Anderson, Handelsman, & Klevansky, 2007, p. 62). Although the authors provided a series of questions to guide the process of writing their ethics autobiography, they suggested that these questions could be tailored for particular theoretical viewpoints (e.g., multicultural or family therapy approaches).


Strengths and weaknesses. Students identified three values, motivations, behaviors, or skills that would be their biggest assets as ethical therapists, then were asked to consider how these might also serve as their biggest weaknesses as ethical therapists (e.g., their compassion might lead them to engage in nontherapeutic boundary violations).


Anger autobiography. Students were asked to write an anger, conflict, and violence autobiography, paying attention to their experiences with these and the meanings of these experiences in their family and relationships. The autobiography can help students identify forms of anger, conflict, and violence to which they are especially sensitive, their typical responses to these feelings, and factors limiting their ability to respond well.


References


Human Sexuality is a unique course in the psychology spectrum. Whereas psychology is a subject that can be inherently personal, particularly when compared to topics like chemistry or British literature, human sexuality is another step closer to the most intimate lives of your students. Student engagement can look very different in a Human Sexuality classroom because of the private nature of the content. Students can be deeply engaged, but may not be willing to share or show their interest. Instead, their engagement may be at a more personal or individual level. In addition, students come to the course with different experiences and goals. They are often inherently and deeply engaged in some content, but very distracted or disinterested for others. Keeping students’ focus and engagement throughout all topics is challenging for a number of reasons.

There are a number of specific roadblocks to engagement that instructors of Human Sexuality should keep in mind. These roadblocks are often particularly important for an instructor to attend to during one or several areas of content and may only be relevant to a few students depending on their personal experiences. For example, students may not feel that some content is personally relevant to them (e.g., research methods and sexual orientation for students who identify as heterosexual). Additionally, students may believe that they know everything there is to know about a topic, and that there is nothing else they can learn (e.g., contraception and STIs). Students may find certain material objectionable and choose not to engage with it (e.g., elder sexuality, STIs, and kinks and paraphilias); whereas other students may have personal experiences that make it difficult for them to engage with some material (e.g., rape and sexual harassment). Finally, there is research-based content that counters the students’ prior learning either at home, in school, or in their religious lessons (e.g., homosexuality and religion and sexuality).

Recognizing the very personal reasons why students may not be fully engaging in any one class day is critical when trying to engage them with the material. For example, if a student has disengaged because they do not feel the content is relevant to them, a discussion at a theoretical level might be a good approach; however, if the issue is that the content is too personal, making your approach more theoretical may move them to simply shut down altogether.

An important part of keeping students engaged in a human sexuality class is to make the entire class aware of the roadblocks above, and to encourage a supportive environment where everyone is able to participate at a level which is comfortable. We recommend preparing a “Classroom Bill of Rights” that gives all students the right to opt out of uncomfortable discussions, as well as the right to state opinions without fear of attack. Letting students know they are in a safe environment and they must safeguard the comfort of others can go a long way to fostering an engaging community in a classroom. You will find a sample Classroom Bill of Rights, as well as ideas for instituting one of your own below.

Following the two original activities below is a bibliography that represents the very best activities in human sexuality that encourage student engagement from a wide variety of sources.

**Original Exercises/Demonstrations**

**Sexuality and the Law**

Students often have ideas about what constitute legal and illegal sexual acts, including: ideas about incest, bestiality, homosexuality, age of consent laws, and more. Furthermore, students may be unaware of other laws about sexuality, including underage sexting and adultery. If you have access to a local lawyer who specializes in sexuality law, consider asking him/her to volunteer to run this class session. By and large, current laws about sexuality are based on restrictions rather than on providing rights. This exercise involves students examining the legal restrictions and then moving into a discussion of what a sexual bill of rights might look like.

**Supplies.**
- A copy of your state’s penal code section that relates to sexuality. This material is accessible via http://law.justia.com/index.html.
- A copy of other laws as they apply. This process may take time to obtain copies of
the relevant law statutes. We recommend starting with the state laws, and then find others based on students’ brainstorming ideas.

- A class set of handouts of the Declaration of Sexual Rights from the 14th World Congress of Sexology in Hong Kong in 1999
  http://www.tc.umn.edu/~colem001/was/wde Clara.htm

**Brainstorm.** Begin by clarifying to the students that you are not a lawyer, and none of the activities or conversation in this class should be understood as legal advice or legal opinion. Then ask students to brainstorm local laws about sex and sexuality. Write all of their ideas on the board. After they have finished brainstorming, address each law. If what they state is a law, circle it, and read the relevant law from your local code. If something on the board is not a law, cross it out. If your students have not mentioned all of the laws, which they probably will not, add the missing ones to the board.

**Bill of sexual rights.** After the brainstorming session, ask students to look at the board and generalize what kinds of laws they are seeing. More specifically, who do the majority of these laws restrict? Generally, the laws presented restrict people, or citizens. Challenge the students to consider instead a series of laws that restrict the government’s ability to legislate sexuality for their citizens. In other words, what a Sexual Bill of Rights might look like.

Put the students in pairs or small groups to write a Sexual Bill of Rights. We recommend that instructors read a few examples from the United States Bill of Rights to guide their writing style. After about ten minutes, have the class reconvene and ask one group to read their list of rights. Other groups should add rights from their lists until every unique right has been read. Some students might disagree with other people’s rights, or ask for clarification of what they mean. Encourage this kind of conversation and analysis. After this process, give each student a copy of the Declaration of Sexual Rights. Read through it as a group, asking the following questions for each right:

1. Whether we have access to it in the United States
2. Whether individuals in other countries have access to it
3. How lives might be changed if they were given access to it

**Classroom Bill of Rights.**

As described in the introduction, it is important for instructors and students to be aware of how participating in a Human Sexuality class is different from many other college courses. One way to foster a safe community in a sexuality classroom is to get your students to participate in adopting a Classroom Bill of Rights. Before your class, draft a short version of a classroom bill of rights. You should make the material viewable on a large screen, and possibly give copies to students as well. For example, your draft may look something like this:

- **Right to Pass:** We will respect one’s choice to abstain from the discussion.
- **Respect:** We will listen attentively to what others have to say, allowing one person to speak at a time.
- **Sensitivity:** We will recognize that it may be difficult for our classmates to share stories about themselves and their feelings.
- **Supportiveness:** We will not criticize other people, although we may respectfully disagree with their point of view.
- **Understanding:** We will be aware that others may differ in their religion, cultural background, or in other ways and we will, therefore, be thoughtful about the comments we make.
- **Confidentiality:** We will not repeat anything that is shared within the group to anyone outside of the group. Although we may talk about the content of the group discussion, we will not identify who has raised a particular issue or who has disclosed a personal story or feeling.

During class, explain to your students the concept of the Bill of Rights. Explain this document is designed to guarantee a safe environment for discussing very personal topics during the semester. All class participants, including the instructor, will be expected to abide by the bill of rights once it is adopted. Present your draft, and give the class time to read over it. Ask the students if they have any additions to your draft, or deletions from it. If there are changes to be made, allow the entire class to participate in the editing process. If possible, put the changes on the screen as well.

After the class input, have the class vote to adopt the bill of rights. The following class, prepare a revised copy with your signature, and present it to students. Each student can be asked to sign two copies, one that they keep, and one that the instructor
keeps. Through this simple activity, students develop a clear sense of the importance of classroom communication and support. It can be an effective way to prepare your classroom for an engaging semester.

**Annotated Bibliography**

**Abortion**

*Abortion: teaching all sides without taking sides.* Students take positions on a variety of statements about abortion (e.g., “It’s okay with me if a woman has more than one abortion.” “A man should have an equal say in whether or not his partner has an abortion.”). Discussion follows. Students are then randomly assigned to support a range of potential abortion laws and make their case to the large group. Discussion questions of the legal status of abortion follows.


**Pregnancy: A timeline.** The primary thing this activity includes is a timeline of pregnancy and the kinds of abortion that are available as a pregnancy progresses. Statistics about the frequency of kinds of abortion and discussion questions and ways to introduce this material to students are also all included.


**Abstinence**

*The abstinence lineup: much more than "Just say no!"* Teachers explain that for any safer sex method, there are steps involved - even engaging in abstinence is not as pithy and easy as the numerous slogans suggest. The teacher then quickly gives a condom demonstration, clearly stating each step. Students are broken up into groups of four, and are given 10 pieces of paper, four of them have four steps of being abstinent (e.g., Decide how you define "sexual abstinence" and carry out your abstinence plan with a partner). They put the four in order, and then write six remaining steps on the other pieces of paper and put them in order. Groups look at each others’ steps and discuss. Discussion questions are included.


**Anatomy**

*Capitalizing on menstruation.* This exercise involves a combination of class time and homework. Assign students to bring in print ads or transcribe television ads about menstrual products one or two classes before using this activity. Discuss historical beliefs about menstruation and menstrual flow, as well as current beliefs from other cultures. Have students discuss whether or not they think these beliefs are similar or different from our current belief system. Collect the ads from the students, and then discuss them and then evaluate ads for indication of impurity or uncleanness.


**Draw and label.** Divide the class into groups separated by sex. Ask the men to draw and identify the female anatomy, and the women to draw and identify the male anatomy. This exercise can be done both before and after the lecture on anatomy.


**Body Image**

*Ideal bodies drawing & discussion.* Students draw pictures of what they consider to be ideal male body and the ideal female body. Discussion questions include the realism of the images and what it means to have a different body type.


**Child Sexual Abuse**

*Sexual abuse: what you need to know.* Present a handout of five important things to know about child sexual abuse (i.e., abuser and victim profiles, sexual abuse can involve touch or no touch, can make a victim have positive or negative feelings or both, generally involves secrecy, and involves power differential). There are three stories of sexual abuse which allows a guided conversation about the five things to know. There is also a handout on the process of deciding whether or not to tell about abuse, which allows for a complicated understanding of the potential outcomes of telling. Discussion questions for each step are included.

Communication

Sexual scripts. The instructor writes out many behaviors that could happen during a sexual interlude. For example: They go on a date, she receives oral sex, he touches her chest, etc. Additionally, the instructor comes up with several events, such as first date, third date. Each group of students is given the set of behaviors, and is asked to place them in the "right" order for their given event. Insure that each event is given to more than one group, and then have groups compare how their orders differ. You can include more variations by asking students to think about different-aged participants.


Facial expressions and touch. Students draw emotions from a stack and try to get their partner to guess that emotion through facial expressions or touch alone. (Touch is done exclusively through holding hands while the eyes are closed.)


Contraception

Contraceptive scavenger hunt. This exercise again involves class time and homework for students. Assign either groups or individuals to visit places where contraceptives are available. For each, students must write down the location of the contraceptives, the cost, and the variety they were able to find. Upon returning to class, students should discuss their comfort level during the project, as well as what they learned. Were there any surprises about contraceptive availability?


Determining gender. Have students brainstorm a list of things that they use to determine the gender of others. Write three headings on the board: gender determination that is obvious without any intimacy; those that require some intimacy; and ones that require some scientific investigation (e.g., hormone assay). After the class has several methods under each heading, go through each, and ask the class which ones seem most / least effective. Is there one that is foolproof? If not, how might we be able to accurately determine gender? An important point of this exercise is that since gender is psychological, even scientific methods can be incorrect.


Language

Breaking the language barrier. Explain that sexuality can be discussed in at least four different types of language: the language of science (e.g., fallopian tubes, intercourse), childhood language (e.g., weewee or number two), street language (e.g., screw, dick, pussy), and common discourse (e.g., having sex). Students break out into groups, professor gives the students a sexual word, and each group brainstorms as many synonyms of that word as they can. Give the students 2 - 3 min. Then continue with other words. Group who gets the most synonyms wins. Discussion questions are provided. Afterward, groups read their scenarios and report out to the whole class.

Love

Is this really love? Students brainstorm ways to finish the statement, "If you're in love, you..." They then agree or disagree with the number of statements about love ("Jealousy is a sign of love," "A person can fall in love many times," "A person can prove they are in love by having sexual intercourse," etc.). Students brainstorm what makes a good partner and then categorize descriptions of relationships into "Healthy" and "Unhealthy." Discussion questions for each activity are included.


A continuum of love. Explain to your students the concept of a continuum. Next, ask them to place themselves on a physical continuum from agree to disagree on several statements about love. This activity will encourage your students to think about their own beliefs, as well as seeing where others fall. Some example statements are: "Love is the same for men and women." "There is such a thing as "love at first sight."" and "You can be deeply in love with more than one person."


Reproductive Technology

Forced choice case studies. Up to six case studies of real life examples of ethically and legally debatable uses and outcomes from advanced reproductive technology are read. Students are given two potential answers and forced to choose between them. The groups gather their thoughts and then have short debates on the outcomes.


Research

The bias of surveys. Assign each group of students a research question relating to sexuality. Have each group think of at least one way that the research could be swayed by various problems in research such as sampling bias, subject honesty, retrospective memory issues, etc.


Evaluating studies in lay publications. Either assign students to find an article discussing an issue about sexuality (magazines are actually great for this) or bring your own. Ask the students to work in groups to find the strengths and weaknesses of the research design and then to make suggestions about how to improve it.

Sex Disorders & Therapy

Benefits of masturbation. Many therapeutic approaches for sexual disorders call for masturbation either alone or in front of a partner. Many students find masturbating embarrassing, and thus this recommendation is a difficult concept for them to grasp. Have the class brainstorm a list of reasons why masturbation is embarrassing. Break into groups and come up with solutions to these problems - how might you help a person get over their embarrassment? How might masturbing help?


Sex Education

Just say know: navigating mixed messages about "sex". Students are assigned to small groups where they brainstorm messages from one (or two) sources of messages about sex (including Advertising, School, Parents, Music, Friends, etc.). They then decide on the top three most pressing messages from their assigned source. One individual is picked to represent each source, puts the placard around their neck, and tries to get their top three messages across in as persuasive a way as they are able. (It might be fun to have them do it all at the same time.) Good discussion questions are included. There is also an activity that talks about government regulations about sex education. The activity is good, but the information is out of date. The last activity is about designing a sex education curriculum. It is a relatively sparse activity, although the concept of having students do this is rich in potential.


Sexual Arousal and Response

Orgasm descriptions. Have students write up a description of what an orgasm feels like to them. Make sure each person includes their sex along with the description. After class, the instructor should select a few of the descriptions, type them up removing any information that identifies the sex of the author. Copy the descriptions and then give them to the students. Have them attempt to identify the sex of the person who wrote each, and why they made that assumption. After the students have completed this part of the activity, reveal to them the actual sex of each author. Discuss whether or not the students were able to distinguish between male and female orgasms.


Sexual Coercion

Sex, a decision for two. Students agree, disagree, or say they do not know about the statement: "When people say 'no' to sex, they usually mean 'no.'" Discussion questions and interactions for each of the three groups follow. A story of a date rape from a third person perspective follows, along with a guide for small groups of students to analyze the story and the communication and signals. Scripts and script starters for role plays are also included.


Sexual boundaries. Create a list of scenarios that your students might experience regarding sexual boundaries. Ideas include "Calling a friend bitch," "Telling a woman that she has beautiful breasts," "Asking your boss out for drinks" etc. Have students take turns reading one scenario and responding to it, explaining whether they think it is appropriate or not, how best to respond if it happens to you, etc. After the reader gives their thoughts, have the other students contribute as well. This activity is good for showing that we all have different boundaries, different expectations of behavior, and that miscommunication is easy if you aren't careful.


Sexual Orientation

Experiencing homophobia. Students are asked ahead of time to select one of four exercises to try. Each exercise will challenge the student to experience what it feels like to be subjected to homophobia. Through real life interactions, the student will learn about the effects of homophobia. Examples of the exercises include carrying a book or magazine that deals with GLBT issues and carry/read it in public for a week / keeping a heterosexual relationship “in the closet” for one week / wearing a pro-GLBT t-shirt or button for a week. After the week long exercise, students are to discuss their experiences with the class.

Everyone deserves respect: looking at abstinence and stereotypes. Students brainstorm their different reactions to the phrases "A woman who abstains" and "A man who abstains" and then compare and discuss. Teacher reads a short quote from a non-straight individual who felt excluded from a discussion of abstinence. Students react to a story where assumptions about gender and sexual orientation are tied up in conversations and education about abstinence. Discussion questions are included.

Sexuality Through the Lifecycle

Parental decisions. Give small groups a scenario about a decision that parents might have to face about their children's developing sexuality. Each group should discuss the scenario, and come up with a decision for the entire group. Groups then present their decisions to the class as a whole. Examples of scenarios can include: You are the parents of a teenage girl. Would you allow her to spend time in her room with the door closed with her boyfriend? Would you provide condoms to your teenager?

Sex between older couples - guided imagery. Ask the students to close their eyes and to imagine a couple coming home from dinner and beginning to have a sexual interaction. Give as much detail as you'd like, but avoid mentioning anything about the ages of the couple. At the end of the imagery, tell the class to imagine that the couple is 75 years old. Get reactions from the class about how this made them feel. What does this say about our feelings about sex in older individuals? Do your students think there is an age at which people should stop having sex?

STIs

Breaking the news. Have students break into pairs. Assign each student an STI. Next, have the pairs role-play telling their "partner" that they have the STI they've been assigned. This activity uses communication skills, and requires the students to revisit the specifics of the STIs. After each student has had a turn to share their health status with another, come together as a class and discuss the challenges of sharing that you have an STI.

How serious is the threat of an STI to me? Students are given prepared index cards, find partners to talk with about a number of relevant questions, and write each person's name on their card. At the end, everyone who has talked with the person with an “I” on their card was exposed to an STI, and those who talked with the “affected” people were also exposed. Those not exposed have cards with a “C” to indicate condom and some have an “A” to indicate abstinence.

What is Sexuality

Circles of sexuality. Students brainstorm ideas or words that are brought to mind by the five areas of human sexuality created through Advocates for Youth - sensuality, intimacy, sexual identity, sexual health and reproduction, and sexualization. After brainstorming, the group discusses the ideas and compares them with the handout.

Sexual norms in the U.S. Blank posters are placed around the room with headers of interest like: masturbation, circumcision, age, intercourse, etc. Students are invited to walk around and discuss the topics with others, and to add information to each poster. After the posters are filled, the class discusses what they have written. The instructor can supplement the student provided information with norms from other cultures to explore the ideas of how sexuality is different in different parts of the world.
Psychology of Religion

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The person seeking teaching resources for the psychology of religion will encounter simultaneously no options and unlimited options. By and large, this sub-discipline has focused far more on research than on teaching per se. Among the various introductory or advanced level texts that are now available in the area, teachers will not, to the best of our knowledge, find any dedicated ancillary materials such as study guides or test banks. Likewise, there is little material published in professional journals about the teaching this topic; it has also been quite rare over the last several decades to find conference sessions devoted to discussing teaching strategies. The downside is, of course, that preparation can seem a daunting task for individuals wishing to initiate a new course. The upside is that one is not inadvertently constrained by someone else’s impressions of what is important within the field and personal creativity can have more influence.

With these caveats in mind, it is our intent to offer a series of tips that have worked well in various undergraduate sessions taught over the last few decades. In addition to these necessarily static ideas, consultation of the Psychology of Religion web site (Nielsen, 2008) will provide a continually refreshed stream of up-to-the-minute information, including sample syllabi, field relevant announcements, films, books, journals, the Sommervogel Archive of psychology of religion publications, and a plethora of other materials to enhance courses. The American Psychological Association Division 36 (Psychology of Religion – APA Division 36, 2010) also provides links to various email lists where one can solicit teaching related input from scholars around the globe. For a global perspective on the field, the International Association for the Psychology of Religion is another excellent resource (International Association for the Psychology of Religion, n.d.).

Original Exercises/Demonstrations

Embrace Transdisciplinarity

The formal and informal study of religion is much older than the field of psychology. Even a cursory reading of the history of psychology reveals that many concepts in this “new science” emerged as expansions or reactions to theological formulations; this is not surprising when one realizes how many of the early psychologists were either from clergy families and/or attended seminary prior to identifying themselves with psychology. Without sacrificing any emphasis on the scientific method as the bedrock of the discipline, it would be interesting to trace backward the current areas of concern to their earliest appearances. By doing so, the students “inadvertently” learn about the history of science. As two other examples, a course might take a thematic turn and investigate how the psychological experience of faith is related to architecture, or how the inherent reductionism of neuroscience does or does not provide useful information concerning the psychological aspects of believing.

Capitalize on the Negative

What is missing in the psychology of religion? Well-grounded theoretical work. Much of what passes for theory is at best a loose collection of ideas. Looking at psychology department requirements across the United States reveals that only a very few institutions include an explicit course on theory in their curriculum. Pointing out that well-structured theory is largely absent within this realm provides a natural segue to teaching about what theory is and is not and equipping students with tools to think creatively on this topic. This theme of thinking about theory can be fruitfully carried across the semester by having the students collaboratively assemble concept maps (Coffey et al., 2003; Novak & Cañas, 2006). Novak and Cañas (2006) include a link to download free software that can be used to develop a graphic concept map. There is a learning curve that, although slight, may be prohibitively steep for some classes.

An alternative, admittedly less scientific approach, is to select a single theory (or suspected theory) and have students compose short papers outlining that topic. Then, the instructor can assemble all the papers into a single file and paste that text into a “word cloud” generating tool (e.g., Feinberg, 2009) to create a graphic representation based on word frequency. The image resulting can be used to generate discussion about the convergence of ideas.
concerning the theory under investigation. As an example, the word cloud derived from this chapter appears in Figure 1. The emphasized words in this chapter are clearly students, psychology, religion, teaching, theory, and course.

Figure 1. Word Cloud of this Chapter

**Be Original**

A large number of this area’s foundational works were composed in an era that is now in the public domain. As a result, a course can be structured so that students have an opportunity to read a wide variety of primary source materials, often at little or no cost. As survey text books continue to rise in cost, it is nice to have this fiscal alternative, but even more important, students who engage primary documents get to learn how to come to their own conclusions about the nature of these classic efforts. A wide variety of seminal works are located on the Classics in the History of Psychology website (Green, n.d.). These are not sorted with respect to the psychology of religion, but many of the early works are clearly applicable. Other less well-known websites provide full text options for hard-to-find early journals in the field such as the American Journal of Religious Psychology and Education (Open Library, 2010) or even complete books. For instance a search using the terms psychology and religion returned over 400 full text hits, with modest redundancy (Internet Archive: Digital Library of Free Books, Movies, Music & Wayback Machine, 2010). Using these and other public domain works, it is possible for instructors to assemble a paperless, free reading list that will expose students to the foundations of the field.

**The Media and the Message**

American culture holds dear the paradox of having high rates of individual endorsement of religious beliefs while simultaneously declaring it improper to discuss those beliefs in public. Perhaps as a result of that social restriction on public expressions of faith, the media, especially film, and more recently television and print have had a lot to say on the behalf of believers and non-believers alike. Taking advantage of the ever increasingly easy access to video is a natural way to introduce topics. Nielsen (2008) provides a helpful listing of relevant media on the Psychology of Religion website.

**Talk it Out**

The authors of the most relevant texts in the area have either spent their entire careers or significant portions thereof at primarily undergraduate institutions. They understand teaching and interact well with students. If they and you both have decent internet connections and even very inexpensive webcams, it is very feasible to set up live video conference calls using free services (e.g., Skype, ustream.tv, etc.). During one semester when psychology of religion scholars visited as guest lecturers, students were required to submit a minimum of five substantive questions in advance. The result was that the speakers could address pertinent questions in their own style and the students were engaged waiting for their specific inquiry to be addressed. In addition, the value of generating questions ahead of time was demonstrated by the fact that students came prepared with “follow up” questions to press for greater understanding. Both presenters and students came away with very positive evaluations of the experience.

**Go Deep**

One way to approach the teaching task is to structure a course in the psychology of religion around the presentation of different foundational theories within branches of psychology (e.g., behaviorism, cognition, social) or to go more deeply into a specific branch (e.g., the social psychology of religion). The benefit is that this reinforces ways of thinking taught in other core psychology courses and demonstrates how those frameworks help to make sense of faith systems. The cost is that it is very hard to bring the ideas down to a concrete level because “religion” (or “spirituality”) tends toward the abstract.

**Go Wide**

An alternative is to choose a specific topic, for instance, how psychology helps us understand the role of physical worship spaces. Grounding the discussion in explicitly psychological principles makes sure students remember they are in a psychology class as opposed to religious studies. Then it is possible to begin to draw in a variety of works from other disciplines that help to inform and expand the psychological ideas. As these disparate sources are drawn together, students acquire the knowledge necessary to think critically about the psychological components of belief systems and how
that psychology is enhanced (or not) by a plethora of other factors.

An Example Course Structure

The following course example expands on the article by Capps (1980) by modeling a fourth approach that is gaining in popularity: mixed methods. Here, the scholar embraces both quantitative and qualitative data, balancing their pros and cons. Following Capps’ model, the belief system linked to this style can be described as stable and exploratory; the individual has a firm set of personal beliefs, but is welcoming to other systems without either discounting or advocating them. The example offered is in this mold.

This course was designed with several key components: short reflection papers, essay exams, site visits, and a physical model construction. The reflection papers were based on a wide swath of reading materials. Students systematically engaged grouped chapters from Hood, Hill, & Spilka (2009) spread across the first few weeks to open their eyes to the breadth and depth (or lack thereof) of the various core areas of investigation within the field. Students simultaneously were assigned selected chapters from Jaccard & Jacoby (2010) setting the stage for students to, if not generate theory, at least recognize possibilities for theorizing and sense its presence or absence.

The next text introduced was Grudin (2010) because it is a very “friendly read” and helped balance the intensity of the other two texts. This resource served as an excellent discussion starter and a natural bridge to standard aspects of perceptual psychology. To stay at an easier level of reading, the Kirwan (2005) book steered the discussion toward theoretical notions at the same time that the students were completing the Hood et al. (2009) book. This experience well-arms students with information about research findings within the field; therefore they are able to think about how the presented results can be explained by a particular theory. For example, Girard’s notion of mimicry was presented as having the potential to unify and drive forward the psychology of religion.

Blesser & Salter (2006) brought the class back to a very practical level by directing attention toward the fact that different faith traditions inhabit worship spaces that are often quite dissimilar. The discussions centered on how the divergent spaces are experienced psychologically.

Continuing in the vein of reflecting on how spaces foster various psychological reactions, Rowland & Howe (Eds.; 2008) made clear how the selection of building locations, materials, and architectural principles can work harmoniously or in opposition to each other. The selections from this ancient text provided both a sense of the rich history of shaping people’s psychological spaces for worship and for leisure as well as concretizing these elements in an unambiguous fashion.

Burger & Salazar (2008) took students into a cultural time and place with which they were largely unfamiliar. This text provided students with an opportunity to explore how these ancient people constructed a sacred space and to make observations about how that space would control and direct the psychological experiences in very distinct ways.

The readings concluded with Girard, Antonello, Rocha, & Kirwan (2007) exposing students to primary-source documents dealing, once again, with theoretical notions. This final work added another layer of sophistication with which to evaluate the topic at hand.

Over the first three-quarters of the semester, students encountered the texts in the intentional order described above, experiencing a movement back and forth between theory and practice. Along the way, some texts were distinctly challenging to stretch their capacity for reading and synthesizing. Other works, more popular in nature, allowed them to catch their intellectual breath. Students were required to write two-page reflection papers on each reading, with the goal of integrating the materials.

This series of writing prepared them to encounter and evaluate actual worship spaces with regard to their psychological influences. Field trips to local worship spaces, next, moved the discussions to an applied orientation. A center where Buddhist, Native American, and other similar traditions gathered in a primarily outdoor area was juxtaposed with a Roman Catholic Basilica and outdoor grotto. These locations were further distinguished from an Islamic mosque, the Unity Temple (designed by Frank Lloyd Wright), and a Baha’i temple. To add to the mix, one traditional Episcopalian Cathedral, an early 1900’s semicircular (United) Methodist building, and a Salvation Army soup kitchen/worship center were compared with a very contemporary Episcopalian structure. During each of these visits, students were encouraged to gather their own experiential data by asking questions such as: How did the space feel when simply standing quietly? What perceptual cues suggested the theological focus of the congregation? How did sound play off the structure? What was the role of light? Did the space feel open or closed, elevated or grounded?

Together, the readings and the site visits prepared the students for their final project: building a scale model that used theory and practical applications to create a specific psychological experience within a worship space. Here, the students
had the opportunity to work alone or in groups. The outcome was both a physical structure and a public presentation describing the reasoning behind the choices of design and materials.

With multiple short papers, three essay tests, a final essay exam, field trips, the physical construction of a scale model, and a public presentation, the course addressed a wide swath of learning objectives from developing writing skills to cultivating synthetic and generative thinking. This approach is not for the faint of heart because it requires a large and sustained effort on the part of both student and instructor. The payoff, however, is best described in student comments which centered on this theme: “I never realized the complexity of how spaces, whether ornate or plain, influenced psychological experiences. Whether in the specific context of expressing faith or in any secular situation, I can’t help but think about the messages the design enhances and subdued. My way of seeing and experiencing has undergone a radical change.”

**Annotated Bibliography**

For ease of reference, the following annotated bibliography is broken into three sections. The first presents a short list of the articles generated by using the search terms teaching, psychology, and religion across social science, humanities, and medical databases. These articles contain few practical examples for classroom application, however, they do highlight some of the perennial issues that surround teaching this sort of class.

The second section contains the references mentioned in points 1-7 of the Original Examples/Demonstrations. The final section offers annotations of the texts used in the sample course.

**Teaching Related Articles**

**Research models.** Capps outlines three broad ways that scholars in the psychology of religion orient themselves to conducting their research. Some favor a compare/contrast emphasis on dichotomies; others highlight the landscape of options or perhaps embrace a more open-ended (qualitative) style of work. Capps notes that each of these preferences can be reflective of the instructor’s personal attitude about the origins and values of religious beliefs. Recognizing and taming these biases is a substantial challenge that must be addressed because it influences the manner in which the teaching will be conducted, the types of examples used, and so forth.


**Professing belief.** This article addresses, in brief form, the question of professing Christianity (or any specific belief) as a part of teaching the scientific study of psychology. The author calls on her own experience as an instructor who professes Christianity and indicates that addressing in the classroom the psychological interpretations that her beliefs shape, helps to illustrate to students how all scientists have beliefs that shape their interpretations, and how acknowledging this shaping can improve the personal understanding of the students and improve the quality of the future scholarship of these potential researchers.


**Religion from a traditional psychological perspective.** Hester and Paloutzian focus on teaching the psychology of religion from traditional psychological subdisciplines (i.e., developmental, personality, social, and clinical), this chapter briefly addresses the resources available for addressing scientific aspects of the course. Religious experience is featured in several texts, and Hester and Paloutzian note the resources available to instructors who wish to address this in depth. The chapter concludes with suggested assignments and assessments, including some that require self-reflection, group assignments in which students examine the function of religion in diverse groups, and assignments in which students design – or actually implement – an empirical study relevant to the course.


**Teaching Non-Social Science Majors.** Petrovich explores issues related to teaching a social science (psychological content) class to humanities students (primarily students of theology) who have no prior experience with psychology or with the scientific approach. The author suggests two specific reasons why a broad approach to psychology, including exposure to scientific research methods, should be offered to theology students. First, a grasp of scientific methods helps students understand and apply psychological findings. Second, awareness in this area contributes to the science-religion dialogue.

Courses related to psychology of religion. Although somewhat dated, this study reports on what courses related to psychology/religion are taught where, and by whom, using what books. The author indicates concern that the “‘religionists’ have a monopoly on all the courses” (p.18), and even those taught by psychologists are probably taught by those biased toward religion, despite the recognized breadth of perspective attested to by the compiled booklist. The author suggests that without significant changes the described monopoly will provide only a “religious psychology of religion” (p. 18).


The proper place for religion. In a rebuttal of Wagner and Struzynski (1979), Vande Kemp reiterates her initial findings and concerns, clarifying what might demonstrate full cooperation between the disciplines. Cited among her concerns are a proper place for religion, the willingness of “‘religionists’ to appropriate the work of psychologists” (p. 143) and the “inadequacy of theological anthropologies to deal with psychological questions” (p. 143). The concern of a subordinate disciplinary identity comes to the fore, but for Vande Kempe, despite the monopoly held by the so called religionists for the teaching of psychology/religion courses, the theologians are the ones whose disciplinary identity appears to be subordinate. Vande Kemp sees the need for the psychologist to be able to address and engage classical theological systems, but finds this currently unattainable, as a consequence of the autonomy and monopoly she describes.


Interdisciplinary courses. Responding to the Vande Kemp (1976) article, these authors (one a psychologist and one a theologian) agree with Vande Kemp’s evidence of monopoly, and her concern to address it, sustain optimism that truly interdisciplinary courses can be achieved, with psychology and theology remaining “fully and compatibly autonomous” (p. 140). They cite their own five year endeavor to create such a course as evidence for their position.


The use of the word cult. The author articulates concerns about use of the word “cult” in the teaching of psychology; specifically, negative connotations, and misuse of the term based on the perceptions of the user. Woody explores conflicting definitions, identifies the impacts on students, and makes recommendations for teachers, scholars, and practitioners based on more extensive evaluation and objective terminology.


Texts Cited in the Practical Examples


Readers will find this a helpful description both of the idea of concept mapping and also how the technique can be of specific benefit within educational settings.


A simple cut/paste of a document into a target window will generate a graphic representation of word frequencies, with the size of the font reflecting the frequency of the words. Users can alter the horizontal/vertical orientations, choose from a variety of fonts, manipulate colors, and save their work. This artistic presentation of linguistic data naturally captures student’s attention and fosters spontaneous discussions of the actual content at a level more accessible to some classes than the full conceptual maps.


An archive of public domain works relevant to the field of psychology, this resource includes many very early documents that demonstrate the links
between the rise of psychology as a science and its origins in theological constructs.

  Representing the oldest established group of scholars interested in the topic, this site provides information concerning relevant conferences and offers the opportunity for teachers to solicit examples that move beyond the perspective of the United States.

  A free source of various documents, this site contains a variety of classic works in the psychology of religion that are frequently written about, but less frequently read in their entirety.

  Nielsen’s effort is one of the first to consolidate materials related to this area of study. The pages range from resources for teachers (e.g., texts, films, syllabi, etc.) to blogs, and job openings in the field.

  This work presents a thorough introduction to the idea of conceptual maps at a level most appropriate for the teaching professional. The ideas are exceptionally helpful in generating thinking about how to encourage more advanced students to actively engage in the process of theory identification and construction.

  This site is another excellent source of full text, psychology of religion relevant documents that are in the public domain.

  The flagship organization of the discipline, the Division 36 website’s main contribution to teaching is its hosting of listservs that connect people who are active in the field. The site also is helpful for teachers interested in attending conferences to learn more about the discipline.

**Texts Cited in the Example Course**

  Ranging from psychoacoustics to philosophy, the authors engage readers with a transdisciplinary *tour de force* of how physical spaces can influence people who enter them, whether intentionally or unwittingly.

  The text first presents theories concerning the use of Machu Picchu and details about its construction. The second major section catalogues artifacts from the location.

  In this collection of papers, readers are introduced to primary writings of Girard. The basic themes of his theory are introduced, but readers need to be sufficiently savvy to extract them from across the various documents.

  With a very readable style, Grudin introduces the notion that spaces convey messages. Religious spaces are mentioned with enough frequency for the instructor to be able to make the connection directly back to a course on the psychology of religion.
This edition continues the updating of one of the inaugural texts to circumscribe the field. The volume is indispensable both as an overview of research already completed and as a source of ideas for developing new lines of inquiry. Although not a simple read for undergraduates due to its rapid fire presentation, students frequently comment in subsequent semesters that they greatly appreciate having a copy for ongoing reference. Instructors need to be prepared to remind students to read with the intent of observing the arc of the field if this text is used in a survey course. If used as a solo text, instructors may elect to focus on a few select chapters to help students appreciate the depth of information available.

Covering both quantitative and qualitative approaches, this material is an accessible introduction for students who have heard about theory, but have not engaged it beyond a superficial level. The presentation gives students the tools to critically evaluate existing ideas and begin to think creatively on their own.

The author uses this short text to make explicit the core ideas of Girard. There are plenty of opportunities for psychologists of religion to reflect on how these notions of group formation, struggle, and continuation are applicable to contexts of faith communities.

This classic text emphasizes the concept of architecture as a “liberal art” that necessarily draws knowledge from all fields of study. Readers have the opportunity to see, for instance, how decisions about the mathematics of proportions of entryways have links to history, philosophy, and psychology.
The Psychology of Gender

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Over the past century, there have been many changes in male-female relationships, in the ways men and women think of each other and of themselves, and in the societal norms for feminine and masculine behavior. The male-female distinction has been assigned meanings and significance that have implications for work, family, leisure, and almost all aspects of social life. In fact, the differences and similarities between men and women are compelling for their personal, but also their political, economic, social, and educational implications. This chapter presents examples of active learning activities and how these experiential learning exercises are adapted to the course goals and objectives in a psychology of gender course. The focus of the chapter is on how to best integrate new research findings to the students’ existing knowledge base to create a new appreciation of these complex issues and how they influence each individual’s life.

Course Development and Goals

The Role of Personal Reflections

In my psychology of gender course, students are expected to (a) gain an appreciation of the basic information on the psychology of gender, (b) develop an understanding of the research methods, together with the ability to evaluate research in this area critically, (c) achieve an ability to apply the knowledge to their own life, (d) demonstrate an ability to synthesize a large amount of information coherently, logically, and rationally in written and spoken form, and (e) build a sense of community through common experiences, collaboration, engagement, sharing of information, mutual support, and shared engagement. Importantly, students should experience what it is like to be a woman or man and how those attributes have shaped their lives. I expect students to grapple with the ideas of what it means to grow up female or male. How do these experiences change their perceptions, behaviors, and thoughts? Gender should become explicit in their everyday life. Because of this emphasis, students are expected to complete weekly exercises outside of class and to reflect on those. These reflections must include the newly acquired concept vocabulary. They must also show the integration of the information from the students’ own observations as well as information from class discussions and the textbook. The reflections must be sent to me for feedback prior to the topic being discussed in class. Reading the reflections ahead of class allows me to collect data for use in the class discussion. The first and last reflections (how gender has impacted their own lives) are the same in order to assess student learning.

First Day

Introductions Through a Photostory

The first day of class sets the tone and atmosphere for the semester. To help students feel comfortable talking in class and to encourage them to share their experiences, it is crucial to create an atmosphere that is inclusive and devoid of judgment. Students must get to know the instructor and each other well. Thus, besides introducing the goals and objectives, my philosophy of teaching, and the major aspects of the syllabus, I present a “photostory” (free downloadable program available at http://www.microsoft.com/downloads/details.aspx?displaylang=en&FamilyID=92755126-a008-49b3-b3f4-6f33852af9c1 from Microsoft. Note that “photostory” does not run on Mac platforms; Apple provides similar media applications that can be used instead) about my latest travels and family. This brief photo montage provides a platform for introducing who I am and what I do. This self-introduction also familiarizes students to the photostory application that they will use for their final project (see below).

Students Create a Television Ad

To introduce each other, students prepare a “television ad.” I divide the class into teams of three or four and ask students to create an ad that would “motivate students to sign up for this psychology of gender course.” The teams present their ad to the class while introducing each other. This team building exercise permits everyone to speak, to get to know each other, and it helps me assess what some of the students’ course expectations are. Examples of student ads can be found at: http://www.icherney.com/Teaching/Courses/Gender/Gender_home.htm.
**First Day Assessments**

To evaluate students’ current knowledge base and to assess student learning, I recommend starting the course with a pretest that consists of a few course content questions (the posttest is completed during the last day of class). Students also complete several gender inventories (e.g., Bem Sex Role Inventory) that are later used to exemplify the vocabulary and concepts. The first day, each student lists ten adjectives and nouns that come to mind for the concepts of “female” and “male.” I compile those to create a master that I refer to throughout the semester when discussing stereotypes, categorization, gender norms and roles, etc. I also instruct students to respond to some gender myths (True/False questions) that we start to debunk together. These myths are revisited the last week of classes.

**Introduction and Research Methods**

**Placing Gender in a Historical Context**

Not only is it important to introduce the new concepts and vocabulary related to gender at the beginning of the semester, but it is also important to place those into the historical context. There are several possibilities to do that. One effective way to introduce the historical aspect of gender research is to show older gender related advertising or propaganda clips. For example, I show the video clip “Easy does it,” a 1940 film by the Handy (Jam) Organization. This brief archival clip illustrates the gender roles of the 1940 very well and always engenders a vivid class discussion. This clip also serves as an example for traditional gender roles that are discussed later in the semester (see below).

**Random Assignment Using Post-its**

Similarly, the research methodology specific to gender research needs to be introduced or revisited. I developed an exercise to illustrate the power of random assignment that is very easy to use. Write a different grade point average on a post-it starting from 4.0 going downward (3.9, 3.8, etc.) and randomly distribute a post-it to each student. Ask students to divide the class by some variable of their own choosing (e.g., eye color, birth months, etc.) and to average the post-it GPAs for each group. Students will soon notice how similar the mean GPAs are. If the means turn out to be dissimilar, one can discuss the impact of unequal group sizes, skewed, or small group sizes on central distribution measures.

**Critical Assessment of Research Methodologies Using Video Clips**

Gender research issues and the new vocabulary can easily be integrated throughout the course. Throughout the semester, while showing video clips, as for example “Men, women, and the sex difference: Boys and girls are different” (Paul, 1996) hosted by John Stossel that illustrates theories of gender differences, I use the clip to discuss research biases. Small teams compile a list of criticisms, biases, and strengths of the research presented. These are then presented to the classmates and discussed. Similarly, on reading assignments, I ask students to evaluate the research hypotheses and conclusions. Over the course of the semester, students develop critical research skills.

**Observational Research and Operational Definitions with Yearbooks**

An active learning exercise that illustrates observational gender research is the “yearbook” exercise (Lipsitz, 2000). Students bring a yearbook from a coed school to class and test the null hypothesis that there are no gender differences in smiling. To accomplish this, students have to first reach a consensus on the operational definition they will use. Pairs of students record smiling data of one class from their yearbook and tally the smiling/no smiling for each gender. This hypothesis testing exercise is highly enjoyable for students and illustrates the importance of operational definitions in research. The findings can also be used to explain different gender theories, such as the deficit model (Deutsch, 1990; that women smile more because of their inferior status relative to men), or the gender communication differences model (Tannen, 1991; that women smile more because of women’s greater concern with interpersonal comfort and harmony or their different reactions to social unease).

**Gender Roles and Gender Stereotypes**

**Violating a Gender Norm**

One of the first reflections that I assign is one where students violate a gender norm. As part of their homework reflection, they first establish a list of gender norms for their own and the opposite gender. Second, they decide which gender norm they want to violate and why, and third, they describe their experience and reflect on it. I compile a list of the gender norms that male and female students chose to violate and use it in class to direct the discussion. In class, students share and compare their experiences. Very quickly, it becomes apparent that there are more negative consequences for men who violate a gender norm than for women. A video clip from “Tough guise: Violence, media and the crisis in masculinity” (Jhally, 1999) helps to illustrate the consequences of violating a masculine norm. This exercise is powerful for many, because the majority of students feel
uncomfortable in the situation. This exercise is also
good for introducing sexism in its different forms
(i.e., benevolent, traditional, modern, hostile).

**Gender Roles in “My Big Fat Greek Wedding”**
A good introduction to gender roles and cultural
issues is to show the first five minutes of the movie
“My big fat Greek wedding” (Zwick, 2002) and also
to ask students to review a television show. Small
teams of three to four students choose a television
show and discuss the various roles characters portray
and answer questions such as: Which shows depict
traditional, egalitarian, or transitional ideologies?
How have these changed over the past decades?
Compared to the “Easy does it” (1940) clip, what
roles have changed and what roles have stayed the
same? Which roles do you think will change in the
future and how?

**Stereotypes in Movie Trailers and Cartoons**
One way to illustrate the development of
stereotypes is to show trailers from popular children’s
movies. For example, the “Toy Story” (Lasseter, 1995) and “Finding Nemo” (Stanton & Unkrich, 2003) trailers illustrate the fact that all but one
character in the movies is masculine. I also instruct
students to observe children’s television shows. They
count the number of male and female characters
depicted in the cartoons, how many of the narrators
are male or female, and the roles of each character.
Students integrate those numbers and observations
with information from the textbook and clips they
have previously watched. They also reflect on their
findings and on what this means for the development
of gender stereotypes. In class, they discuss the
various shows and I present the cumulative data of
their observations.

**Stereotypes at the Local Toy Store**
Another interesting active learning exercise and
reflection is to invite students to visit a local toy store
(Lloyd, 2008). In their reflection, students describe
the colors and packaging of toys, the lay-out in the
store, the intended purpose and the message
conveyed by some toys, as well as the gender of the
toys. For example, they describe differences between
boys’, girls’, and neutral toys. Note that if students do
not have the means to get to a toy department, they
can do the exercise searching for the information on
the internet. To supplement that class, besides using
the observations as discussion points, I also present
the latest research on toys and gender (e.g.,
Alexander, 2003; Blakemore & Centers, 2005;
Cherney & Dempsey, 2010; Cherney, Harper, &
Winter, 2006). We discuss how experiences with toys
may be predictable of later behaviors and attitudes.
Assigning these articles prior to the class is useful.

**Magazines Illustrate Gender Stereotypes, Body
Image, or Eating Disorders**
Another way to illustrate gender stereotypes is to
have students bring copies of men’s and women’s
magazines to class (e.g. Vogue, Cosmo, GQ, etc.).
After watching Jean Kilbourne’s "Killing us softly 3"
(Jhally, 2000), students break into groups and look
for images that support or fail to support Kilbourne’s
findings. Each group then reports their findings back
to the class. These ads can also be used to discuss
standards of body size for men and women and the
prevalence of eating disorders.

**Cognitive Abilities**

**Mental Rotation and the Lack of Women in STEM
Fields**
An interesting active learning exercise to
demonstrate cognitive gender differences is to have
students complete the mental rotation test
(Vandenberg & Kuse, 1978). Because mental rotation
is one of the most robust gender difference (e.g.,
Voyer, Voyer, & Bryden, 1995), it is the most likely
to show differences even in a small class. Before
completing the test, ask students to estimate how
many test items they will solve correctly. After
coding their responses, students compare their
estimations and scores. Differences between women
and men are typically apparent, and permit an in-
depth discussion of the “nature-nurture” debate. Are
these differences due to sex hormones, genes, or
other biological differences, or to differences in the
environment? Because mental rotation is linked to
mathematical performance, particularly in women, it
often leads to the discussion on the lack of women in
the STEM (Science, Technology, Engineering, and
Mathematics) fields. Additional clips (e.g., “Men,
women, and the sex difference” with John Stossel)
also explore different hypotheses. I also assign the
article by Gould (1980) on Women’s Brains that
describes how in the 19th century, the scientific
evidence showed that women had smaller brains.

**Hypothesis Testing and Research Design on Gender
Differences in Mathematics**
After being introduced to research findings
suggesting that gender differences in mathematics
skills do not emerge until junior high, students break
into groups of three or four and create a list of
potential hypotheses to explain this finding. They
must rank their hypotheses according to how
plausible they are and how much variance they are
likely to account for. After presenting their ranking in
class, they are instructed to evaluate each hypothesis and design a study that would test each hypothesis. When reviewing the research evidence, they can again evaluate the hypotheses.

**Stereotype Threat in Mathematics**

Discussions on achievement, self-concept, self-esteem, fear of success, and attribution for performance can be supplemented by illustrating the power of stereotype threat (Steele & Aronson, 1995). Prepare two short math tests. On half of the instruction page write “Men have been shown to outperform women on this math test,” and on the other half: “Men and women have been shown to perform similarly on this math test.” Divide the class randomly into two groups (try to get an equal number of men and women in each group) and proctor the test. The students can score their own tests. Even if no gender differences emerge, the resulting discussion on stereotype threat and their negative consequences highlights the power of implicit cues and stereotypes. This is also an excellent theme for a reflection.

**Gender Theories**

**Biological Theories - Raising Bruce as Brenda**

The Bruce Reimer story is an excellent way to introduce biological theories. The video (e.g., BBC, 2008) tells the story of twin boys Bruce and Brian Reimer. Unfortunately, Bruce’s circumcision went horribly wrong, and based on the prevalent nurture theory of that time, Bruce was sexually reassigned to become Brenda and was raised as a girl. Many years later, Brenda became David Reimer. In 2001, John Colapinto wrote his story in “As nature made him: The boy who was raised as a girl.” This book is captivating and one that students enjoy reading. The Bruce Reimer story coupled with research on girls who suffer from Congenital Adrenal Hyperplasia (CAH) present strong evidence of the “nature” part of the nature-nurture debate (e.g., Berenbaum & Hines, 1992).

**Evolutionary Theory – Survey on What We Look for in Future Mates**

For a good introduction to evolutionary theory and sociobiology present students with a list of about 15 characteristics and traits that they may find attractive in a future mate. Ask them to rate the characteristics in terms of the importance that they attach to each in choosing a mate on a scale from 0 = irrelevant to 3 = indispensable. Characteristics such as “ambition and industriousness,” “chastity,” “good cook and housekeeper,” “good financial prospect,” “good health,” “good looks,” often show significant gender differences. These findings often lead to a discussion of the hunter-gatherer theory.

**Gender Role Socialization – Children’s Books**

Gender-role socialization can also be illustrated through children’s books. Ask students to bring children’s books to class. Have teams of three or four students record the sex of all the characters and how they are portrayed. What are the characters doing? Are they good or evil characters? How are they depicted? I also bring to class a children’s book that is in a foreign language. A student volunteer tells the story to a preschooler. We later analyze the words that the volunteer narrator used to describe the pictures. Was the story told at a basic, subordinate or superordinate level (adapted to the child’s age)? What types of descriptions were used? What was omitted? These types of observations help students understand the complexity of environmental input and how implicit features may influence gender development in the long-term. Using a foreign book also demonstrates cross-cultural gender differences in children’s books.

**Gender Role Socialization – Dress a Baby as a Boy or Girl**

A video clip that illustrates gender-role socialization well is one where a baby who is dressed either in blue or pink (The Brain, 1997) is handed to a mother for observation. Mothers who think the baby is a boy tend to hand him a masculine toy and to put him on the floor, whereas mothers who think the baby is a girl tend to hand her a feminine toy and to talk to her. This clip can also serve as an introduction to other environmental influences in children’s upbringing.

**Emotion and Aggression**

**Play with Toys**

A popular active learning activity that illustrates different styles of interactions between boys and girls is to provide students with different types of toys. I typically have the class sit in a circle and lay out masculine, feminine, and neutral toys in the middle. Teams of three to four are assigned an age group and asked to role play. They get a few minutes to review the research findings on play and gender. The caveat: women pretend they are boys and men pretend they are girls. Discussions cover questions such as what interactions or behaviors during the simulated play are supported by research or how the styles of interaction change with age or gender. See http://www.icherney.com/Teaching/Courses/Gender/Gender_home.htm for an example.
Differences Among Masculine and Feminine Aggression

Students watch the film "Tough guise: violence, media, and the crisis in masculinity" (1999) written by Jackson Katz. They then break into small groups and compile a list of the most and least persuasive arguments made in the film and their reasons for these choices. They also read an article on relational aggression in females (e.g., Crick, Ostrov, & Kawabata, 2007). They are then asked to come to their own conclusions about whether there are differences in aggression between male and female teenagers and, if so, what the nature of these differences is.

Communication

Observations of Nonverbal Communication

To illustrate differences in nonverbal behavior, I ask students to observe dyads (two men, two women, and one woman and one man) in a social setting. If time permits, they can do the exercise during class. Students count the number of times each person in the dyad touches the other, smiles, or makes eye contact. Personal space is also assessed. Students then compare the nonverbal behaviors of the men and women (same-sex and female-male dyad) they observed. The discussion often leads to the interaction between gender and cultural differences in nonverbal behavior.

Deborah Tannen and Gender Differences in Communication

An excellent video recording on gendered communication that I show at the beginning of the communication chapter is “He said, she said: gender, language, communication” (DiNozzi, 2001). Deborah Tannen gives excellent examples of how male and female communication differs. Students are then instructed to think of examples from their own lives where these patterns of gender communication have happened and the consequences.

Relationships

Advice Columns and Magazines

Students bring in "relationship advice" obtained from advice columns/articles in popular men's or women's magazines. Working in groups, students look for stereotypes of men or women in the articles, evidence that is consistent or inconsistent with research on gender differences in relationships, and are then asked to determine whether these articles discourage healthy psychological development of men and women and the success of heterosexual relationships.

Relationship Building Through Personal Ads

Another way to introduce relationships is to ask students to view personal ads in magazines or on the internet. In their reflection, they report how many words and what types of words men and women use to attract mates to their cause. The way men and women describe themselves in personal ads illustrates the values that each attach to certain characteristics. The findings can lead to discussions about mate selection and evolutionary theories, as well as the different expectations men and women have when in a dating or committed relationship.

Mental & Physical Health

Students are given a chart detailing the top ten causes of death for both men and women in the U.S. They work in groups to generate hypotheses explaining any differences or similarities seen between these two lists. This hypothesis building leads to a discussion of how lifestyle and behavioral factors, along with gender-role socialization, have an impact on the health-related behaviors of men and women.

Group Projects

Photostories as Creative Research Project

At the end of the semester, I like to assign a creative project. Students are divided into groups of two or three and assigned a topic that was not covered in class. Alternatively, they can choose their own topic. Recently, I have assigned debate questions (e.g., Is gender identity innate? Are men and women more similar than different?). The presentations must not exceed 6-7 minutes, must be based on research, and must be created using the photostory (Microsoft; see above) software. The groups must create their own slideshow and narrate the text. Many also add music to their presentation. Examples of photostories are presented at: http://www.icherney.com/Teaching/Courses/Gender/Gender_home.htm. The photostories are played in class and the classmates ask questions about the topic. Each presentation is peer-reviewed and rated on a scale of 1 to 10 on the quality of the information presented, answers to the student questions, quality of the photostory, creativity and thoughtfulness, quality of the organization, content coverage, and whether they get the “message” of the presentation. The photostories are then uploaded on my website where they can serve for future presentations.
Conclusions

Students learn best when they are actively engaged in the learning process and associate the learned material to their existing knowledge base (Cherney, 2008). In a study examining students’ memory for course content in psychology courses, including a psychology of gender course, students remembered best the concepts they had acquired when being actively engaged in the exercise and having to reflect on that concept. Overall, when students were asked to list ten things they remembered from the psychology of gender course, 64% listed gendered play (see above activity), 48% communication differences, 44% health related gender differences, 40% photostories, and 32% romantic relationships. All these events except for the photostories, were introduced using activities and had a reflection homework accompanying the activity (Cherney, 2008).

Annotated Bibliography

Biological preparedness for gender roles. Alexander’s study suggests that an innate bias for processing object movement (boys) and color/forms (girls) may contribute to different behaviors in young boys and girls and their toy preferences. In other words, preferences for toys may indicate a biological preparedness for a masculine or feminine gender role.


Bruce becomes Brenda and then David. This documentary tells the story of twin boys Bruce and Brian Reimer, and how Bruce’s circumcision went horribly wrong. Based on the prevalent nurture theory of that time, Bruce was sexually reassigned to become Brenda and was raised as a girl. Later, Brenda became David Reimer. Additional information is also available from John Colapinto’s book (see below).


Feminine and masculine toys. This study examined the different characteristics of feminine and masculine toys. The researchers found that girls’ toys were associated with physical attractiveness, nurturance, and domestic skills, whereas masculine toys were associated with violence, competition, and movement.


Understanding play complexity and reasoning about toys. This study examined 3-5 year-old children’s gender classification, reasoning, and play complexity with gender neutral and ambiguous toys. Color was the most frequently used reason for toy gender categorization.


What are “boy” and “girl” toys? Boys and girls classified gendered toy pictures into “boy toys” and “girl toys.” The results showed that many children used egocentric reasoning as an explanation of why particular toys were considered feminine or masculine.


The Bruce Reimer story. Colapinto’s book recounts the story of Bruce Reimer who was raised as Brenda and who later became David Reimer.


Do women smile more than men? This article describes the deficit model that women smile more because of their inferior status relative to men. This theory can serve for a discussion for why women smile more than men (yearbook exercise).


Sexist images. This is a documentary about sexist images of women in the media. It discusses how women continue to be portrayed by advertising and the effects this has on their images of themselves.

Visit of a local toy store. This chapter describes how students can find out gender messages by visiting a local toy store.


Debate on gender differences. John Stossel (ABC News) illustrates theories of gender differences. The clip examines the differences between the sexes and whether they are the result of biology or environment.


Finding Nemo. The fretful Marlin and his young son Nemo become separated from each other in the Great Barrier Reef. Nemo, a clown fish, is unexpectedly taken from his home and thrust into a fish tank in a dentist’s office overlooking Sydney Harbor. The trailer depicts the lack of female characters in this popular children’s movie.


Gender communication. An article that describes the gender communication differences model that women smile more because of women’s greater concern with interpersonal comfort and harmony or their different reactions to social unease. This article can be used to illustrate why women tend to smile more (i.e., in yearbooks).


Is it a boy or a girl? A brief video clip showing a baby dressed as a boy or as a girl and the behavior of mothers who are asked to play with the baby. Mothers who believed the baby was a boy gave the child boy toys and put the baby on its stomach on the floor. Mothers who believed the baby was a girl gave the child girl toys and were more likely to hold the baby close to themselves and talk to her.


Robust gender differences in mental rotation. The mental rotation test contains two separate subtests, each with 10 spatial rotation exercises with a total of 20 exercises altogether. Each exercise consists of a drawing of a three dimensional object composed of blocks (target) and four drawings to the right of the target object. The four drawings consist of two correctly rotated pictures of the target, and of two distracters (mirror images). The participants must mentally manipulate the target object and find the two correctly rotated objects. This test shows the most robust cognitive gender differences.


References


Personality

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In this chapter I present an original activity using humor to teach students about unconscious processes as an introduction to the theories and techniques of Sigmund Freud. Next, I present a fairly comprehensive annotated bibliography of activities to teach personality psychology, either as part of a general introductory course on psychology or as part of a course on personality. These demonstrations were chosen to reflect topics unique to personality psychology instead of topics like sexuality, gender, biopsychology, neuroscience, physiology, research methods, statistics, history, culture, and diversity which are covered elsewhere in this volume.

Noticeably absent from this list are articles describing how to teach using personality tests. Today, there are many legitimate personality tests available both legally and illegally on the Internet, often with automatic scoring built in. Seeing specific questions often helps students grasp complicated theoretical concepts.

Also missing are the many demonstrations on using songs in class to illustrate personality concepts (see for example, Hughes, 1984; Leck, 2006) and general resources for teaching personality psychology (see for example, Frick, 1991; Merrens & Brannigan, 2008; Miserandino 2011). Finally, where there are many demonstrations on a given topic (e.g., assessment, the Barnum effect, implicit personality theories, and critical thinking) I have chosen to include only a few representative demonstrations. That being said, the annotated bibliography below contains some usual and unusual demonstrations in many areas of personality psychology including achievement motivation, the five factors, self and identity, genetics, narrative, critical thinking, and much more.

Original Demonstration: Humor and the Unconscious: A Freudian Analysis

According to Sigmund Freud, our ego must be constantly vigilant to prevent our unconscious urges, especially the unacceptable ones, from being expressed. However, much to our chagrin, they leak into our everyday behavior. In addition to free association, hypnosis, dreams, accidents, Freudian slips, and symbolic behavior and the like, Freud suggested that unconscious sexual and aggressive urges bubble to the surface where they can be expressed in a socially acceptable way through humor. Indeed, Freud analyzed jokes and spontaneous quips, comebacks, and reactions for evidence of these unconscious workings (Freud, 1905/1960). According to Freud, humor is a socially acceptable way to express our aggressive and sexual desires. Many people who would not ordinarily express these instincts find bathroom humor, sexual jokes, or jokes making fun of certain groups of people quite funny. Although a person might consciously believe “I was only kidding” the impulses expressed are quite real on an unconscious level.

Nevo and Nevo (1983) were authors of one of the first studies to directly test this notion in a sample of Arab and Jewish 12th graders in Israel. Using a modified version of the classic Rosenzweig Picture Frustration study (Rosenzweig, Clark & Helen, 1946), students wrote captions for a series of cartoons under one of two conditions. In line with Freud’s observations, their responses showed more aggression and sexual associations when they were instructed to answer as humorously as possible, as compared to when answering as realistically as possible. Further, their responses often showed the use of the same techniques often found in dreams such as displacement; condensation (in the form of double meanings); representation by the opposite; regressive, childish thinking; and absurd and fantastic thoughts.

Nevo and Nevo’s (1983) study can easily be replicated with a class to demonstrate how unconscious urges (i.e., sex and aggression) can be studied in humor. To do this, find three to five interesting pictures featuring exactly two people (or at least two people in a prominent position). Try to find a range of genders, ages, situations, etc. Show these pictures, one at a time, to the class. Explain to the class that their task is to write responses from the point of view of the person on the right (e.g., what the person on the right might be saying or thinking) under each of two conditions. For the first condition, students should answer as if they were actually present in the situation. Caution students to be as realistic as possible and not try to be funny. For the
second condition, students should answer as humorously as possible, again, writing as if they were the person on the right. Alternatively, if your class is large enough, you may want to assign half the class to each of the conditions and compare responses across the two conditions.

When they are done, instruct students to code both of their responses to each of the three to five pictures using a 1 (no aggressive content) to 3 (much aggressive content) scale with 2 labeled as some aggressive content. Instruct students to go back and rate the sexual content of their responses using the same 1 (no sexual content) to 3 (much sexual content) scale. Finally, have students add up their judgments yielding total aggressive and total sexual content scores separately for the two conditions (answering as if they were present, answering humorously). Have them indicate by a show of hands, which condition had higher sexual imagery scores and which had higher aggression scores.

Lead the class in a discussion of why answering humorously increases sexual and aggressive content, calling on volunteers to read their responses to illustrate. The class can consider the following questions and use their answers as an introduction to the work and theory of Freud, the psychoanalytic perspective, or to unconscious processes:
1. In which condition do we see more sexual and aggressive responses?
2. Why is it that sexual and aggressive content comes out when trying to answer humorously?
3. What makes these topics so “funny”?
4. Are they surprised by the results?
5. Why are people, generally, not consciously aware of their sexual and aggressive urges?
6. Are there other forbidden urges or topics that might be expected to appear in humor?
7. How else might unconscious sexual and aggressive urges be studied?

You can take the demonstration further and have the students tally occurrences of displacement, condensation, representation by the opposite, regression, and absurd thoughts, and use the demonstration as an introduction to techniques of dream analysis. In the original study by Nevo and Nevo (1983), 83% of the humorous responses used one of these Freudian techniques whereas only 17% of the realistic responses did so.

Annotated Bibliography

Achievement Motivation

Aspiration level. Demonstrates that aspiration level can be influenced by group standards and actual performance, with successes increasing it and failures decreasing it. Student-volunteers engage in a simple manual dexterity task in front of the class after giving their predictions of how they expect to perform based on group norm information provided by the instructor.


Alfred Adler

Earliest memory and family constellation.
Students recall and reflect upon their earliest memory, and upon their position in the family constellation to illustrate the importance of these aspects to Adlerian theory.


Assessment

Designing a personality test. In one class period, students discuss and identify personality constructs, generate a list of 25-30, and then write items to measure eight of them. Then they administer their test to two volunteers outside of class. Finally, students compile and analyze the results as a group during the next class period. In the process, students learn about operational definitions, test construction, reliability, validity, methodology etc.


- Also reprinted in (1996) M. E. Ware & D. E. Johnson (Eds.), Handbook of Demonstrations and Activities in the Teaching of Psychology, Volume III: Personality, Abnormal, Clinical-Counseling, and Social (pp. 441). Mahwah, NJ: Erlbaum.)

Students can also design a personal test on a construct provided by the instructor (Camac & Camac, 1993; Hynan & Foster, 1997), one of their own choosing (Wesp & Eshun, 2005), the Freudian anal character (Davidson, 1987), aspects of temperament using interviews (Friesen & Ellis, 2008), or even the instructor’s own personality using constructs from Cattell’s 16PF inventory (Reinehr, 1991).

Interpreting test results. Using a sentence completion test (provided) students analyze and discuss the results of two hypothetical participants.
In the process of discussing their impressions of “Al” and “Bill” students learn about projective testing, projections, situational versus dispositional responses, inter-rater reliability, test validity, problems in interpreting test responses, personnel testing, and cautions in the use of personality tests.


**Validity and reliability.** Students administer a bogus personality test to their friends, and compile the results as a class, discussing and evaluating the reliability, validity, Barnum Statements, and generalizability of the test.


**Predictive validity.** Students pick a personality variable that divides the class into two approximately equal groups (e.g., athletes and non-athletes, musicians and non-musicians, or first-borns from later-borns) and design test items that they predict will distinguish the two groups.


**Barnum Effect**

**Using a bogus personality test.** Students fill out a brief “personality test,” receive the same false results, and discuss the accuracy of the test. Illustrates the Barnum Effect that people agree with vague statements describing personality, despite the lack of predictive validity of such tests.


**Case Studies and Examples for Analysis**

**Textbook of case studies.** Filled with 41 case studies written for this volume on 18 theorists (e.g., Freud, Jung, Horney, Maslow, Kelly, McCrae and Costa, etc.) including 5 cases that can be analyzed from multiple perspectives. Questions at the end of each reading guide students to think about how the concepts of that theory apply to the case and to compare and contrast multiple theories. Includes a chart comparing theories on structure of personality, stages of development, and more. An instructor’s manual is available from the publisher.


**Using biographies.** Describes a writing assignment in which students write a term paper using various theories of personality to understand the biography or autobiography of a real person, living or dead including: a list of figures chosen by students, discussion questions, and an overview of traits, learning, psychoanalytic, sociocultural, and humanistic paradigms.


**TV characters**. Describes a writing assignment in which students write a two-page paper using one personality theory discussed in class (e.g., Freud, Adler, Horney, Reich, Erikson, Rogers, and Maslow) to understand the behavior of a TV character in a specific episode of a TV show.


**Fictional characters.** Describes a writing assignment in which students write four 5 to7-page papers interpreting the personality of a fictional character from a comic strip or children’s story by using a theoretical orientation discussed in class (e.g., psychoanalytic, dispositional, phenomenological, and behavioral).

**Cartoon character.** The Grinch: Students analyze the Grinch’s personality using the theories of Freud, Jung, Adler, Horney, Fromm, Erikson, Maslow, and Rogers.

**Cognitive**

Field-dependence-field independence. Illustrates differences between the personality styles of field dependence-field independence. Students complete a hidden figures test and discuss gender differences on this variable.

**Critical Thinking**

Debates. Two instructors of personality psychology debate key issues in personality psychology in front of each other’s class with students. Topics included: theory vs. research, the unconscious, homeostasis vs. heterostasis, heredity vs. environment, free will vs. determinism, and psychotherapy. The article describes how to conduct a debate in a class, including how to evaluate the impact of the debate on students’ critical thinking. Includes suggested variations for future classes.

**The Parts Party.** The “parts party” is a therapeutic technique in which a person assigns a “part” of him- or herself to other individuals, who take on the role of that part, and interact with the other parts as if at a cocktail party, while the individual observes and contemplates the dynamics. In this activity, students are assigned parts of a personality theory (e.g., id, ego, superego) and interact with each other to see how they fit together.

**Using a modified REP test with concepts.** Students learn abstract thinking by applying a variation of George Kelly’s Role Construct Repertory (REP) Test to important concepts from class, by discussing how two concepts are similar to each other yet different from the third along some important dimension. Students work in groups to identify and discuss constructs for several sets of instructor-provided concepts. In the process, students learn and practice the skills involved in typical “compare and contrast” exam questions.

**Using the REP Test with great figures.** Using a modified version of the REP test, students can compare and contrast great figures (e.g., Wundt, Titchener, Hall, James, Pavlov, Skinner) and important concepts (e.g., structuralist vs. behaviorist, importance of conscious vs. unconscious processes, objective vs. subjective, etc.) for analyzing, synthesizing, and organizing the basic concepts from a history of psychology class.

**Erik Erikson and James Marcia**

Identity formation. Students read *The Catcher In The Rye*, noting the answer to background questions about Holden Caulfield. At the end, they write an essay describing which of Marcia’s four identity statuses Holden Caulfield’s identity can be
classified in and citing evidence from the book to support their view.


**Sigmund Freud**

**Beliefs.** Students answer a 15-question survey, modeled after Freudian theory, to see the influence of Freud on their current thinking.


**Defense mechanisms.** Students act out brief skits for the class illustrating various defense mechanisms while the class tries to guess what each one is.


**Dream analysis.** This activity helps students see that dream analysis, like the interpretation of any ambiguous stimuli, can be influenced by prior knowledge, expectations, motivation, and emotion. Students receive one of three handouts (provided) describing Doris and her dream. Unbeknownst to the students, Doris is described differently in each handout, which leads to different interpretations of her dream.


**Freudian slip.** Analyzes a Freudian slip involving the word “peanut” using a classic psychodynamic interpretation and a modern cognitive interpretation (faulty schema, spreading activation). Because both explanations of this anecdote are inconclusive, students will grasp the importance of empirical testing of theories.


**Id, ego, superego.** Groups of students take on the role of the id, ego, and superego, and act out what each part would “say” in response to the instructor seeing an attractive person. Discussion focused on defense mechanisms the ego might employ in this situation, which part was the loudest, and what this indicates about the instructor’s personality.


**Psychosexual development.** Carlson designed the board game (highly imaginative template included) *Psychosexual Pursuit* where the rules of the game are basic principles of Freudian theory. Students have a certain amount of psychic energy (play money) to spend making their way through the psychosexual stages, where they may experience fixation, buy a defense mechanism (it will cost you), and lose a turn in latency as they make their way into adulthood.


**Genetics**

**Family tree.** Students create a family tree (basic directions are given), keeping track of potentially important psychosocial characteristics including: education, occupation, residence, health problems, illnesses, religion, ethnicity and look for patterns among family members. Instructors may want to add questions about personality characteristics known to have a strong genetic basis, including traits of the five-factor model, incidence of depression, optimism/pessimism, etc.

Implicit Personality Theories

Students can identify their own implicit views of personality and compare and contrast their beliefs at the beginning and end of the semester using a checklist (Kerber, 1987), a short answer survey (provided; Schick & Arnold, 1987), a scale (Wang, 1997) or a questionnaire (provided; Embree, 1986). Results can be tallied as a class, and used as a springboard for discussion of parallels between the students’ responses and the major approaches.

Students’ own theories. Across two paper assignments, students articulate their own preconceptions about personality and personality theories in the form of a theory (e.g., basic assumptions, structure, health, pathology, implications). Students then compare and contrast their theory to existing theories, and critique it using standards for evaluating formal personality theories.


Abraham Maslow

Peak experiences. Describes a writing assignment in which students write about peak experiences they had using Maslow’s theory. Linking experience to theory helped students to learn the material better and to integrate affect and intellect in accord with Carl Roger’s views on academic learning.


Narrative

Of students’ lives. Over the course of a semester, students keep a journal writing about high and low points, a turning point, earliest memory, important memories, influential individuals, and what their futures might be like. In the process, they analyze the patterns in their entries and identify their imago (idealized and personified self-concept) and important themes of their life, exploring their own personal myths, and write an autobiography based on the narrative view of personality of Dan McAdams.


Specific Personality Variables

Locus of control. Two student-volunteers take part in a brief verbal conditioning experiment in front of the class. Generally, people with an external locus of control are more readily conditioned than those with an internal locus of control.


Machiavellian personality. A variation of the classic “$10 game” in which three students discuss how to divide $10 (symbolized here by 10 poker chips) among them. The “money” goes to the two who can agree on how to divide it. People high in Machiavellianism typically do well in this game; low Machs do not.


Self-monitoring. Students take the Self-Monitoring Scale and rate advertisements (preselected by the instructor to be image-oriented or quality-oriented) to appreciate the impact of dispositions on behavior and replicate research on self-monitoring. Low self-monitors are more responsive to quality claims; high self-monitors to image.


Students take the Self-Monitoring scale and a dating survey (provided) to replicate findings from the self-monitoring literature, and to see how a personality variable is related to actual behavior.


Type A personality. Students develop a list of specific behaviors people high in Type A Behavior
are likely to exhibit. Students follow a target person around for a set period of time and identify behaviors from their checklist. In addition to recognizing Type A Behavior, the activity increases students’ understanding of methodological topics including test construction, operational definitions of variables, and observational techniques.


**Self**

**Self vs. personality.** Students answer and reflect on a series of questions (provided) that help them to understand the difference between the concepts of *self* and *personality* and to develop a definition of each, by using inductive, particularistic reasoning based on their own experience.


**Identity.** Outside of class, students create a collage expressing one of their social roles (e.g., gender, family role, ethnicity, etc.) and the values enacted in this role (e.g., achievement, loyalty, security, etc.). Students write a one-page reflection on what they learned about themselves from this activity. Includes evaluation criteria and a partial listing of personal values.


**Interdependent and independent selves.** Students take a brief survey that identifies them as having more of an interdependent or independent self. This exercise includes discussion questions to help students think about the differences between people with each kind of self.


**In literature.** Students read *Crossing to Safety* or *A Shooting Star* and discuss aspects of the self including stress and coping, self-denigration, aging, integrity, narrative psychology, and the meaning of self across the lifespan either as a class, in small groups, or as an outside writing assignment. Describes how to lead a class discussion on a novel in a psychology class.


**Teaching Abroad**

**Sigmund Freud, Alfred Adler, and Viktor Frankl.** Describes a course taught to American students in Vienna, Austria on the psychology of Sigmund Freud, Alfred Adler, and Viktor Frankl, integrating each theorist into the culture and history of the Vienna of their time through lectures, readings, discussions, and class trips.


**Traits**

**Behavior checklist.** Students answer questions (provided) and fill out a measure of the five-factor model. Instructors calculate correlations between each behavior and trait. Students attempt to predict the class’s responses to the behavior checklist based on their standings on the five-factor model. This process illustrates the five-factor model, type I and type II errors, correlation, and implicit personality theories. Can be modified for use with any personality model, or set of traits; students can also generate additional behavior checklist items of their own based on their discussion.


**Factor analysis.** Students randomly select hypothetical personality questionnaire items from a fishbowl and must move about the room finding students with questions containing similar content engaging in a human factor analysis. Once groups are formed, students develop a label for their
scores are presented in the same order to all students, score goes with which characteristic. Because the results and help each other figure out which characteristic. As a group, students discuss their results, but do not know which score is for ambiguity, dogmatism, and self-monitoring and construct a trait, and how a good theory must have the universality of the Five-Factor Model.

Five Factor Model. Students analyze the personality of entertainer Johnny Carson using the Five-Factor model, and considering which of his traits showed change, stability, and continuity over time based on his obituary in *The New York Times*.


Five Factor Model and culture. First, students list 10 traits to describe someone they know and then classify these 10 traits on one of the factors of the Five-Factor model. Then, they read about 3 indigenous personality traits (*Philotimo* from Greek; Filial piety from Chinese; *Amae*, from Japanese), and try to place these on the Five-Factor model. Discussion questions help students to question the universality of the Five-Factor Model.


Self-ratings. Students rate themselves on 20 characteristics and the instructor compiles the results. Students show a self-serving bias (seeing themselves as above-average on positive traits and below average on negative traits), especially for traits that are open to interpretation (high ambiguity compared to low ambiguity traits). Instructors can use the demonstration and discussion to introduce the topic of traits, how to define a trait, how to measure a trait, and how a good theory must have specificity.


Understanding traits in self and others. Students fill out questionnaires for the Five-Factor model, locus of control, need for cognition, tolerance for ambiguity, dogmatism, and self-monitoring and receive their scores, but do not know which score is for which characteristic. As a group, students discuss their results and help each other figure out which score goes with which characteristic. Because the scores are presented in the same order to all students, students can compare and contrast results with each other to figure out their scores. In the process students see what it is like to interact with people of differing characteristics in a work group, and discuss how personality testing applies to personnel testing.


Worries survey. Students fill out the 35-item Worries Survey (provided) and discuss their responses (norms data is also provided) to introduce the topic of assessment and problems with self-reports. If administered along with related personality questionnaires (e.g., Neuroticism) it can be used to illustrate validity and correlation.


References


Happiness comes from… some curious adjustment to life.

-- Hugh Walpole

How do people cope with the psychological challenges of daily living? How can students learn to recognize adjustment issues in their lives and to appropriately apply psychological concepts to them? Will their understanding lead to better coping and even behavior change? Recognition and application of psychological constructs are at the heart of the Psychology of Adjustment course, which can serve as a solid applied offering within the undergraduate curriculum. Because of the intuitive appeal of applied psychology, this course offers the perfect opportunity to engage students through course content.

Broadly defined, adjustment refers to the psychological processes through which human beings manage or cope with the demands, challenges, and frustrations of everyday life. Although the Psychology of Adjustment course covers some of the same topics that are associated with Introductory Psychology (e.g., personality, social psychology, gender, abnormal psychology), the main focus is on topics that relate to navigating modern life effectively, such as stress, coping processes, interpersonal communication, friendship and love, marriage and intimacy, expressing sexuality, careers and work, and physical health. The nascent positive psychology movement, too, is relevant here, as people’s strengths can regulate their well-being in the face of change, opportunity, or upset (see Dunn, Beard, & Fisher, this volume). The relevance of this course is easy for students to see and, as a result, initial student motivation to explore the material tends to be high.

The Adjustment course has been part of the curriculum in psychology since at least the 1940s when a number of popular texts began to appear (such as Klein, 1944; McKinney, 1941; Munn, 1946). The course appears to have peaked in popularity in the 1970s, when Lux and Daniel (1978) reported that it was the tenth most widely listed course in a survey of psychology departments. More recent data from Perlman and McCann (1999) suggest that its popularity has declined, although they reported that it was still among the 30 most frequently listed psychology courses across all types of institutions, and the sixth most commonly listed course at two-year colleges. The decline of the Adjustment course seems perplexing in light of frequent, high-profile pleas for psychologists to emphasize the practical relevance of their discipline (Fowler, 1999; Klatzky, 2009; Miller, 1969; Zimbardo, 2004)

Although specific titles for psychology courses often vary across colleges, this seems to be especially true for the Adjustment course. In its earliest incarnations it was often titled Mental Hygiene. Other popular titles have included Personal Development, Personal Growth, Human Relations, Practical Psychology, Personal Adjustment, Personality and Adjustment, and Applied Psychology. This variation in course titles may reflect a similar diversity in course content, as Bridges (1988) concluded that the topical coverage in Adjustment courses tends to be less consistent or standardized across texts and instructors than in other psychology courses.

We believe that there are at least four compelling reasons for teaching the Psychology of Adjustment course. Given the course's decline in popularity, we think it is important to briefly review these reasons before outlining our suggestions for exercises and activities.

First, the Adjustment course can be especially useful in demonstrating the nature and value of the scientific method. Most courses in psychology emphasize the field's empirical basis, but the Adjustment course presents special opportunities to demonstrate the value of the scientific approach. Why? Because the Adjustment course addresses a host of issues that are discussed in widely-read self-help books, or "pop psychology" literature. This overlap in content can permit instructors to draw compelling contrasts between pop psychology material based on casual observation, common sense, armchair speculation, and anecdotal evidence as opposed to information based on scientific research.

Second, the Adjustment course provides exceptional opportunities for debunking myths related to psychology and enhancing students' critical thinking. Regrettably, myths regarding the
Because the Adjustment course often deals with areas of behavior related to popular myths (such as the presumed benefits of high self-esteem or the erroneous assumption that when “opposites attract” a more stable and happy marriage results), it can serve as a sort of educational reality check. Along the way, instructors can work to improve students’ critical thinking skills. The process of debunking myths can allow instructors to demonstrate the value of looking for alternative explanations for events and findings, checking for contradictory evidence, recognizing the weaknesses of anecdotal evidence, understanding the limitations of correlational evidence, and so forth.

Third, the Adjustment course is an excellent venue in which to stimulate self-reflection and self-understanding. In fact, it would be difficult to learn about adjustment issues without considering whether many of them are self-relevant. Thus, the self as touchstone, or specifically the activity of self-assessment, is integral to the Adjustment course. Many instructors who teach the Adjustment course emphasize experiential exercises that can provoke self-reflection and cultivate improved self-understanding. Many of these experiential exercises would probably feel out-of-place in most undergraduate psychology courses, but the Adjustment course can provide a comfortable context for students to engage in self-exploration.

Fourth, the Adjustment course is uniquely well-suited for fostering self-improvement in students. Typically, the Adjustment course encourages students to use course information to their advantage, to experience it rather than simply to study it, and to improve themselves in the process. Perhaps more so than in any other psychology course, Adjustment instructors often attempt to help students to alter their actual, everyday behavior in healthful ways that will result in self-improvement. For example, many Adjustment instructors use basic research in cognition to help students to improve their study habits, reading skills, and test-taking abilities. Another example of the Adjustment course’s practical focus on self-improvement is the frequent use of behavior modification projects to help students gain greater control over their everyday behavior.

In summary, the Adjustment course can engage students by highlighting the value of the scientific method, debunking myths, stimulating self-reflection, and by providing opportunities for self-improvement. Now, let’s examine some recommendations for useful activities and exercises in the adjustment course.

Original Activities for Teaching about Adjustment Issues

As just noted, experiential activities bring concepts from the Adjustment course to life in the classroom and can have a beneficial impact on the lives of students. What follows are nine activities designed to actively engage students in material from the Adjustment course.

Stress Diary

In order to get a handle on the frequency and nature of stressors they encounter in daily life, students can be assigned a stress diary. The goal is to set aside some time at the end of each day to record that day’s emotional tone (i.e., positive, negative) while also identifying the time, place, and nature of any experienced stress. After keeping the diary for a week or two, students should be able to identify patterns or regularities in their self-reported stress. Subsequently, instructors can illustrate course content by having students identify the various sources of stress, for instance, from their diaries. As a record, the stress diary can be a first step toward identifying particular coping responses.

In-class Coping Strategies

Once stress has been identified, instructors can illustrate a variety of coping strategies in class. For instance, after discussing the research of Pennebaker and colleagues regarding the benefits of writing about stressful events (e.g., Pennebaker, Colder, & Sharp, 1990), instructors can have students engage in the practice in class. By using the same instructions for writing as the original studies, instructors can demonstrate both the scientific method and the application of the research. Of course, students should not be required to share their writing, but they can be asked to reflect on it as they learn about emotion-focused coping strategies. Likewise, strategies such as expressing gratitude, guided relaxation, and positive reinterpretation could easily be turned into a class activity.

Time Management and the Internet

Most students will complain that they have too little free time available to complete homework and reading assignments. In the past, television watching was the main culprit of lost time (to some extent this may still be true). Now, however, the ubiquity of the Internet and accessible wireless connections mean that students can surf the Internet, visit social networking sites, and send email at will, as well as watch videos on YouTube or even Skype to keep in touch with friends and loved ones. Lost or
mismanaged time may now be due to the utility and accessibility of the Internet. The nature of this exercise is a simple one: Have students document how much time they spend online doing non-academic work, as well as when and for how long they are online. No one is going to give up the Internet, of course, nor should they; however, once the regularity of use is documented, perhaps students can learn to better manage their time online.

**Attraction in Personal Ads**

To illustrate the gender differences typically reported in research (e.g., men value physical attractiveness more highly than women), students can conduct informal content analyses of personal ads. Instructors should provide some guidelines on what student should code (e.g., mention of physical attractiveness) and small groups can go through ads to see if their findings match those of research presented in the text. By seeing these differences in ads of their choosing, the research method and findings become more relevant for students.

**Gender Socialization in Children’s Television**

After discussing the research on media effects on gender socialization, have students watch a current episode of an educational television show (e.g., Sesame Street, Barney, Dora the Explorer). In small groups, have them discuss instances of gender socialization from the show. Have them discuss if the episode would be equally healthy (or unhealthy) for both genders. Have them predict what might be different for a non-educational children’s show. In this activity, students are encouraged to generate for themselves the very theories the class is exposing them to, thus allowing for critical thinking and application.

**Critique a Self-help or “Pop” Psychology Book**

Instructors can invite students to select a self-help book examining an issue of interest to them and to write a critique of it. By reporting what material in the book matches scientific research and what does not, students are able to debunk myths, see applications of research, and gain valuable information related to the topic. To get the most from this activity it should not be a book report (we do not want students encoding erroneous information); instead, it should be a critique matching each major assertion from the book to what students have learned in class.

**Personality tests**

Students are often fascinated to see how they score on formal measures of personality. Thus, they are readily engaged by opportunities to take various personality tests. Most research scales that are not published by a commercial publisher are readily available for use in the classroom. Some prominent examples of engaging personality scales include the Self-Monitoring Scale (Snyder, 1974), the Sensation Seeking Scale (Zuckerman, 1979), the Desirability of Control Scale (Burger & Cooper, 1979), the Achievement Anxiety Test (Alpert & Haber, 1960), the Frost Multidimensional Perfectionism Scale (Frost, Martin, Lahart, & Rosenblate, 1990), the Self-Efficacy Scale (Sherer et al., 1982), and the Locus of Control Scale (Rotter, 1966; see Fischer & Corcoran, 1994 for additional possibilities). Scales, such as these, can be administered and scored in a class session. This process can permit the instructor to explain the test norms, and discuss evidence regarding the reliability and validity of the scale. The distribution of scores for the class can quickly be graphed to incite discussion. Once the nature of the scale has been fully described, students can be invited to comment on the face validity of the scale.

**Detecting Irrational Thinking**

Cognitive-behavioral models of depression and other disorders, as well as everyday problems, suggest that they are rooted in irrational thinking. Thus, another engaging exercise can center on asking students to work to detect examples of irrational thinking in their everyday lives. This exercise works best if the theoretical ideas of Aaron Beck (1976) and Albert Ellis (1977) are described first. Then, students can be instructed to identify two or more concrete examples of irrational thinking that occur over the course of the next few days or so. For each of these examples, students might be asked to identify the activating event, describe their negative self-talk, discuss any emotional reactions that resulted, and provide an alternative, more rational way of looking at the event. These examples can provide fodder for lively discussion in class, although instructors sometimes need to be careful about what they encourage students to reveal in class.

**Self-Modification Projects**

As noted earlier, behavior modification projects have long been a staple of the Adjustment course. Obviously, these projects require the instructor to spend a session or two explaining the basic principles of behavior modification. Of particular importance is to give students many concrete examples of reinforcers that can be harnessed to improve self-control. Additionally, instructors need to explain that students can use reinforcers they are already getting, they just have to make the provision of those reinforcers contingent upon meeting specific, measurable behavioral goals. Common target
behaviors for student projects have included increasing studying, decreasing excessive eating, giving up cigarettes, reducing nervous habits, increasing exercise, decreasing acts of verbal aggression, and increasing assertive behavior. Studies suggest that these assignments help students to alter their behavior in healthful ways and students often continue to use behavioral strategies after their course has ended (Barone, 1982; Dodd, 1986).

Annotated Bibliography on Adjustment
Textbooks for Adjustment courses

Duffy, Kirsh and Atwater summarize psychological principles that can be applied to students’ lives with the goal of helping students gain self-insight and live more fulfilling lives. This textbook covers the major perspectives of psychology with an eye toward enhancing students’ knowledge about adjustment. The textbook features chapter outlines, learning objectives, special-interest boxes, a glossary at the end of the book, and end-of-chapter summaries.


Nevid and Rathus present up-to-date information on how students can use psychology to effectively deal with the challenges they face in life. Utilizing a modular organization within each chapter, the textbook encourages students to apply psychological principles through active learning exercises such as self-assessment questionnaires while also emphasizing the scientific nature of psychology by including classic and current studies in the field.


Weiten, Dunn and Hammer incorporate empirical research, applicable examples, and relevant applications to aid students in using psychological principles to understand themselves and enrich their lives. The textbook provides information that can be put to practical use while maintaining its grounding in psychological science. Full of standard pedagogical features, the text also contains experiential exercises, validated questionnaires, and personality tests that encourage students to directly engage with the material.


Articles on Teaching Adjustment

This article describes the impact of a psychology of adjustment class on body-acceptance and self-acceptance among a group of college students. Using a simple experimental design comparing students in the class with those in a control group, an analysis of covariance found gains in acceptance on the two forms of acceptance (as measured by two scales) in the former group. Women appeared to show greater gains in body acceptance after being in the adjustment class than men.


Mayo describes a life-adjustment narrative writing exercise used in a psychology of adjustment course. Quantitative analyses revealed that engaging in the narrative activity led to higher-level learning outcomes. Students reported the journal activity was valuable because it provided the opportunity for intellectual growth and the opportunity to experience meaningful personal insights.


Case-based instruction (CBI) was used in a psychology of adjustment course to demonstrate the applicability of course material to real life situations. Students were randomly assigned to receive either CBI or traditional instruction alone (control condition). Students exposed to CBI performed much better on objective tests assessing retention and application of course concepts than those in the control group.


Meck and Ball discuss the use of progressive relaxation therapy within the context of a psychology of personality adjustment course. Learning such therapeutic techniques may help students to better cope with personal challenges in daily life.


Payne and Woudenberg describe the impact of teaching undergraduate students self-management techniques and help-giving skills in a psychology of adjustment course. In the former case, students selected a personal problem and then followed a prescribed series of steps to address it; subsequent
credit was based on data quality and adherence to steps. Help-giving was encouraged by having students learn about Rogerian therapy and engaging in role-playing and related exercises.


Tasto presents a behavioral self-modification course designed to help students tackle personal problems. Students targeted one behavior to modify; they also completed homework assignments and a final paper. Relaxation techniques and assertiveness training are also discussed as being integral components of the course.


Unger and Palladino describe the psychology of adjustment course as one wherein students can learn to be responsible for their own lives, including dealing with stressors and changing behavior in helpful ways.


**References**


## Section 4. Activities That Can Be Used In More Than One Course

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Ethics of Psychotherapy and Counseling

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Ethics is not (yet) one of the core content areas in the undergraduate curriculum of most schools. Ethics training historically has been mostly (a) graduate, (b) cognitive, and (c) rule-based—none of which is conducive to engaging undergraduates. We believe that there are several good reasons and engaging ways to teach ethics in the undergraduate psychology curriculum.

First, studying the ethics of psychotherapy and counseling by exploring differences between personal and professional ethics provides a useful way for students to think about their personal morality, which is arguably a major purpose of higher education (Lewis, 2006). Second, many students will be consumers of counseling or psychotherapeutic services, and all students will continue to be consumers of professional services. Thus, studying ethics will be useful in understanding all types of professional ethics and should make students wiser consumers as they interact with physicians, attorneys, financial planners—and professors! Third, many students will not be waiting until graduate school to begin their work in professional capacities. In undergraduate internships, service learning opportunities, bachelor’s level positions, and beginning practica, students will be working with clients and professionals who will expect and deserve professional behavior.

Guidelines and Principles for Developing Learning Activities

Engagement is multi-faceted (Skinner & Belmont, 1993; Skinner, Wellborn, & Connell, 1990). For example, students can engage emotionally, cognitively, and/or interpersonally. They can engage with the material, the instructor, other class members, and/or the teaching process (including technology). Activities are most effective when both instructors and students are fully engaged on several levels.

Several overlapping approaches exist to help instructors choose what and how to teach. The wise consumer approach (e.g., Anderson, 2010) may be the most accessible and useful for undergraduates. All students have already dealt with a variety of professionals—physicians, high school counselors, college instructors, restaurant personnel, and perhaps advisors, therapists, personal trainers, police officers, and attorneys. Instructors can ask students to reflect on what made for positive and negative interactions with these professionals. The ethical acculturation approach (Anderson & Handelsman, 2010; Handelsman, Gottlieb, & Knapp, 2005) helps students with the transition into professional roles, which include professional values, principles, and rules that do not completely overlap with those of other relationships. A third approach is ethical decision making (Cottone & Claus, 2000) or ethical choice making (Anderson, Wagoner, & Moore, 2006). The word choice highlights the action of implementing ethical decisions after careful deliberation. The choice-making approach can incorporate both external (e.g., ethics codes, principles) and internal (e.g., virtues, motivation, moral values) factors.

Regardless of the approach, it helps to have criteria by which to judge the activities we design. Gottlieb, Handelsman, and Knapp (2008) outlined five principles to make graduate ethics education effective; you can easily adapt their principles for undergraduates. These principles interact with each other; as we discuss activities that exemplify each principle, remember that good activities will exemplify most or all of these principles.

Focus on Students’ Backgrounds and Needs

Getting students to know themselves—their ethical values and virtues (Anderson & Handelsman, 2010)—can be very engaging, whether they are reflecting on being a wise consumer, their ethical acculturation strategies, or their ethical choice processes. You can facilitate self-reflection via self-assessment questionnaires, case discussions, and writing assignments like journaling or an ethics autobiography.

One self-reflective exercise, which is especially applicable in the wise consumer and ethical acculturation approaches, is to ask students to look at professional relationships via metaphors. Students can complete the following: “The psychotherapeutic relationship is most like the relationship between _______ and _______. The psychotherapeutic
relationship and this other relationship are similar in that they both ______, but they are different because _______. In our experience, the ensuing exploration and discussion naturally brings up issues that can be developed, such as boundaries, trust, exploitation, and confidentiality. You might also explore the use of appropriate self-disclosure—about your own experiences as professional or consumer—as a way to (a) model self-reflection, (b) introduce content, and (c) stay engaged.

**Positive vs. Remedial Ethics**

Helping people follow rules and avoid complaints is called remedial ethics, while helping people achieve excellence and actualize a coherent professional identity is called positive ethics (Handelsman, Knapp, & Gottlieb, 2009; Knapp & VandeCreek, 2006). Positive approaches may be more engaging than remedial ones.

**Social and Supportive Strategies**

The sensitive nature of many ethics discussions creates the potential for students to feel vulnerable (Pope, Sonne, & Greene, 2006). You should work to create a safe classroom environment in which students feel free to reflect and express minority views or opinions that they are not absolutely sure are beyond reproach. The ethical acculturation approach is one way to facilitate such risk-taking. For example, when students share tentative thoughts, it is more supportive (and positive) to discuss their acculturation strategy than to label them or their ideas as unethical. Balogh (2004) suggested that instructors make clear the distinction between personal moral beliefs and professional standards of conduct.

Class discussions of cases are inherently social. You can make these discussions more supportive by having students share their pre-existing moral ideas. Other examples include having students work in small groups to create case examples that make use of course concepts, or to create documents, such as informed consent forms, along with rationales for the forms that incorporate course concepts (Corey, Corey, & Callanan, 2007). Reading each others’ ethics autobiographies can also help students appreciate, respect, and work with their own and their colleagues’ ideas about ethics. You can also ask students to do some perspective-taking (Anderson & Handelsman, 2010), to place themselves in the shoes of another person and feel what the issue would be like from that position (e.g., “What would you do if this were your friend, not your client?”).

**Experiential Exercises**

Case discussions can be very social and supportive, but they are not very experiential. We like to turn case discussions into role-plays. Sometimes we have students pair up and have each pair role-play for a few minutes before a large group discussion.

One way we make ethics more experiential, for students and ourselves, is to make the classroom a microcosm for the exploration of ethical choices. Recently one of us asked an ethics class: “If one of you tells a story that is very funny but slightly embarrassing, is it ethical for me to go home and tell my spouse? Can I tell another class to illustrate a point?” We discuss classroom policies—grading, extra credit, use of cell phones, attendance—using ethical principles from the course. We then explore the parallels between these situations and therapeutic situations.

Students can conduct interviews with psychotherapists about ethical issues they’ve encountered, or with clients who can discuss their reactions to various therapist behaviors. Ethical issues are also particularly well-suited to classroom debates. You can make debates more positive and supportive by adopting Johnson and Johnson’s (1993) strategy of academic or structured controversy, which includes steps where debaters argue the other side and where middle ground is sought between extreme positions.

**Life-Long Learning**

Acculturation, self-reflection, and ethical choice making are life-long endeavors. To have students become aware of time, case discussions can include questions such as: “What would you have thought about this case in high school?” Or, “What would you have judged or done before you read the chapter?” Students can conduct interviews with professionals at various points in their careers, or at least ask experienced therapists what has changed—in them, in the field, in their ethical thinking.

Good learning activities inspire students to develop good habits. For example, Reese (1990) had small groups of students discuss the ethics of popular press accounts of research studies; she reported that “most students find the exercise worthwhile” (p. 261). You can do the same type of exercise with newspaper and internet accounts of psychotherapy (Balogh, 2004).

**Sample Activities**

**Continuum of Perspective: “Is it ethical or unethical?”**

Start by asking students a question, such as, “Is it ethical or unethical for a psychotherapist to hug a client?” Students then physically move to a spot
along a line with the poles of “Ethical” and “Unethical.” Ask for volunteers to share why they’ve chosen their positions. You can institute a rule that no two students can occupy the same position on the line, forcing them to get social and talk with those next to them to make sure they’re in the right spot. You can make it more experiential, and focus on students’ backgrounds, by having them take the role of therapist and discuss their needs and values that might be met by the choice they made.

You can change different variables in the situation and see if students want to move up or down the continuum. For example: “Is it ethical or unethical for a psychotherapist to hug a client who is the same gender?” Another possibility: “Is it ethical or unethical for a real estate agent to hug a client?”

Uninformed Lack of Consent

Sometimes opportunities present themselves naturally. Mitch’s story: Years ago I was nominated for a teaching award that required being observed by two senior faculty members. My ethics class was scheduled to read the chapter about informed consent. I asked my two observers to sit up front with me as I started class. Soon one student asked, “Who are these two people?”

“You really don’t need to know that,” I responded.

“But why are they here?”

“You don’t need to know that either. Trust me.”

I continued to assert my privilege—and my beneficent intentions. Students pressed me for the identity and agenda of the visitors, and I asked students to justify their demands using their readings about informed consent. Do students need to be informed? How much information do they need to know? Do they need to consent specifically to any non-lecture class activity or non-professor presence? Are there exceptions to the obligation to provide information?

Students were certainly emotionally involved in this experience—as was I! The exercise was social and supportive, as students reinforced each others’ use of course material. The experience reflected positive ethics because students were asking me to go beyond minimum legal or ethical rules.

By the end of the period students had made eloquent, emotional, and intellectually sound arguments for my obligation to identify my visitors and disclose the purpose of their visit—which I did. In subsequent semesters I have invited colleagues to sit in and have set up a video camera—pointed at students—at the beginning of class.

Annotated Bibliography

Books

You can use these books as primary texts in ethics courses, supplemental texts in psychotherapy/counseling courses, or references to develop activities for any course.


Using ethical acculturation as the foundation and self-exploration as the major tool, the authors encourage students to be active learners. Students work through numerous journal suggestions and “Food for Thought” activities that can be done in writing, in small groups, and/or in large-group discussions.

For example, one journal entry asks students to create a list of their values (“I think it’s important …”) and then prioritize them. Students then write about those that are most important in their role as a psychotherapist or counselor, and which are most important to their ethical identity. Another journal entry asks students to respond to this scenario:

You and your friend both get a job in which you are counseling high school students in an after-school program. The program has a strict policy against drinking or drug use among both students and staff members, and your friend—who is now also your colleague—is showing up for work high or hung over. (p. 48)

Students then answer a series of questions about their feelings, their desire/obligation to report their friend, the specific actions they would take, and their values. Variations are presented, such as that harm was definitely being done, that the colleague wasn’t a friend, and that reporting a colleague’s misbehavior was mandatory.


The first chapter includes an excellent self-assessment exercise that both you and students can complete. All chapters include cultural issues, cases for discussion, and suggested activities which include small group exercises, role-plays, and class debate topics.

This is a comprehensive review of the literature for psychologists and counselors, and draws upon Kitchener’s seminal work on principles, virtues, and decision making. Each chapter contains multiple case studies.


A great ethics text for undergraduates. It covers the APA Ethics Code (APA 2002) in a very straightforward way. It also takes a positive approach and includes many concise case scenarios.

**Articles**


This article contains a brief overview of the importance of self-exploration in developing a professional identity, an overview of the ethical acculturation approach, and activities addressing acculturation strategies. One activity that explores the *separation* strategy is, “Isn’t that kind of picky or silly?” Students honestly share their criticisms about the ethical guidelines, conflicts they perceive between their personal values and the expectations of the profession, and cases they found surprising or disturbing.


The authors present exercises designed to help students acculturate to the mental health professions. The major technique is the ethics autobiography: Students reflect on their personal ethics and backgrounds. They consider how their values may interact with psychology ethics. The authors suggest assigning the ethics autobiography early in the course to establish an atmosphere where students' histories are valued.

The authors also discuss ethics rounds—a way to introduce ethics discussions at the beginning of a course (or section, or class period). Students introduce themselves by talking about their professional or personal experiences with ethical dilemmas. Even if they have no professional experiences in psychology, many undergraduates have experienced ethical dilemmas such as having a fellow student ask to use a paper that they have written to submit for an assignment in a different course. You can learn quite a bit about where students are coming from, and students also begin to learn about each other.


This article concerns the ethics of teaching, but the four cases described illustrate three ways to make cases more effective: Include variations of the case, make the variations revolve around the major issue or principles (e.g., justice) being studied, and include specific questions for students to answer that lead them towards the issues they need to address.


This article focuses on the process of solving ethical dilemmas by (a) considering the individuals involved and (b) weighing alternatives. The article also highlights the importance of personal values, moral reasoning, and taking responsibility in the decision-making process.


This article presents active learning techniques used to teach ethics in a public relations curriculum, including a detailed list of pedagogical tools to address specific ethics topics. The activities include small and large group discussions, group and individual presentations, class debates, role-plays, student development of ethical codes, journal keeping (particularly regarding internship experiences), and video conferences with practitioners. The author also suggests that instructors focus on early career dilemmas to promote student engagement.


The author presents a detailed description of an undergraduate accounting ethics course that incorporates several techniques (e.g., directed discussion, minute papers) to help students develop virtues and reflective learning that can easily be adapted for psychology. One technique is *reflection logs*, in which students share observations about current discussions, but also go back to previous log entries and reflect upon them in light of what they’ve learned since. He provides specific guidelines for role-plays, including having students reflect on these questions: *(1)* What it was like to be inside the experience; *(2)* What went well for them and why; *(3)* What would they do differently next time; and *(4)* What have they learned about their own ability to reflect on and identify ethical issues” (p. 105).
qualitative survey indicated that the majority of students commented favorably about the effectiveness and innovation of the techniques.  


This detailed article describes a class assignment to promote student engagement and higher level reasoning regarding ethical issues. Students work in groups to create a written dialogue where at least two different viewpoints of an issue must be explored. You could create a list of possible topics or allow student teams to choose their own topics. The arguments in the written dialogues must be based on information from the literature in the field (e.g., journal articles). Individual engagement is also encouraged as students must present a short personal perspective on the dialogue as well. The project culminates in a classroom presentation and discussion. Examples show that students were very creative in their presentations and at times involved the audience as active members as well (e.g., as jury members deciding a case). These dialogues are a great active learning technique and a great way to help assess students’ learning. The article presents data demonstrating that students’ knowledge of course topics increased from before to after their presentations.

References


Engaging Students in APA-Style Writing

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If you want to strike fear into the heart of your average undergraduate, include a formal paper in the course syllabus. If you really want to terrify students, try requiring all psychology majors to take an APA-style writing class, and tell them that they will be writing three formal papers with multiple revisions in a semester. I have been teaching Writing for Psychology at a small state-sponsored university for approximately three years. This class creates so much anxiety for students that I have considered providing smelling salts along with the syllabus. Every semester, I reassure students that writing three papers in 16 weeks is a goal that they can achieve.

At the end of the first class, after we have explored the syllabus and talked about their previous writing experiences, I make my students a promise. I tell them that if they trust me, work hard, and carefully follow the steps that I line out for them, they will succeed. I explain that by doing these three things, students will not simply get a good grade in the class, but will emerge from the class with genuine skills that will help them succeed in every psychology class after this one, and may even help them get jobs. As a bonus, students come out of the class with at least one paper that can be used as a writing sample in a graduate school application.

Developing Trust

The development of trust is an essential part of making an APA-style writing class work. This trusting relationship must be fostered with students from the first day of class. Think for a moment about what undergraduate psychology majors are bringing to the table as budding writers. When I ask students about their reading habits, it often seems like they are reading as little as possible. They are not reading for pleasure. What students typically read is brief, informal, colloquial, and electronic (see Junco & Cole-Avent (2008) for an excellent discussion of this; also Laird & Kuh, 2005).

If students are not reading on a regular basis and thus experiencing reading as an ordinary part of their lives, the specific challenges of reading and interpreting psychological texts and empirical articles may become much more difficult. Not only are students dealing with difficult material presented in formal terms, but they may be experiencing the whole process of reading as difficult, or at least as burdensome. One of the first challenges of an APA-style writing class is to engage undergraduates in reading and comprehending journal articles and other primary texts. A dual focus on active learning and positive support in the first few weeks of class can help students to feel more competent as readers, and to increase their trust in themselves as growing writers.

For instance, the first paper assignment for my writing class leads students to make a critical evaluation of what “everyone knows” about psychology. I provide students with a list of apparent common knowledge statements about psychology, such as “Eating sugar can cause or exacerbate the symptoms of attention deficit/hyperactivity disorder,” or “More psychiatric hospitalizations occur during full moons,” or “Childhood trauma always leads to profound psychological problems in adulthood.” Students must find two empirical articles that provide evidence either supporting or refuting assigned statement, and they must summarize the findings. This assignment helps beginning writers engage with the process of finding, reading, and interpreting
interesting empirical literature in psychology, without becoming overwhelmed.

The earliest stages of my writing class are built around active classroom learning involving this first paper. On our library day, we practice using the psychology databases by searching for the articles they will use for this paper. In class, we use the articles they find as exemplars, looking at what goes into formal psychological writing. As we examine the elements of journal articles, students start to understand how to use these articles to support their points. These first two articles with which the students engage become familiar ground upon which they can begin to trust themselves and their ability to understand the literature of psychology. I also ask students to time themselves reading one of the articles at home. This exercise helps students develop skills as project planners. Even the best students, the most comfortable readers, express amazement at how long it takes them to read a formally written article in psychology. This exercise helps students to see project planning skills as salient, not just for writing for psychology, but for success in other classes as well.

At the same time as we work together on these initial steps, students are slowly gaining trust in me as their instructor. I help them find the articles, sort through the information in the texts, and organize their thoughts about that information. I also help them to envision themselves as developing writers who are gaining specific skills. By the time they put something on paper for the first formal draft, they have already reviewed their ideas and their concerns with me, and they know that I am supporting their efforts. They also begin to accept that my verbal and written comments on their writings as indicators of development rather than indicators of failure. This reframing is essential. If a writing-intensive class is going to be successful, the professor must appreciate that turning in a paper is an anxiety-provoking moment for most students. It would seem that offering a student an opportunity to turn in multiple drafts of a paper would be a way to diminish anxiety. I have come to realize that for students to turn in drafts that they know to be imperfect is an act of real courage, not to mention an act of faith in me. I emphasize the developmental nature of a writing class, and tell students that they will gradually acquire skills through our back-and-forth transactions of writing, editing, and revising; however, for students to accept my feedback on their papers and take their work to the next level, they need to be able to accept themselves as learners. This means that I first need to demonstrate to students my own willingness to accept them as learners.

Trust-building, then, is an important aspect that needs to be also built into the structure of an APA-style writing class. For instance, I start with an assumption that baseline grammar competencies will be varied; therefore, I build basic grammar review into the class, with in-class exercises that emphasize humor as well as proficiency. Weekly 10-point grammar quizzes give students a chance to study specific problem areas such as semicolon usage or active voice. Optional 10-point homework assignments give those students with fewer grammar skills a chance to make up points and gain the proficiency they need. Again, humor is an important part of these assignments: one homework exercise includes a sentence which, when properly punctuated, reads “Problems in anger management are often noticeable in the workplace; specialists in these areas have advised supervisors to arm themselves with large sticks.” For further examples, see Appendix A.

It seems important to acknowledge both the need for accurate grammar, punctuation, and usage, and the need for students to experience themselves as capable users of the English language, despite varying cultural and educational backgrounds. Another way to engage students in the thorny grammar-skills-acquisition process is to encourage them to bring to class examples of bad grammar, punctuation, and usage. For a more formal discussion of issues of trust and instructor credibility in student learning, see Bolk and Goodboy (2009) or Umbach and Wawrzynski (2005).

Working Hard

It is necessary for students to put in extensive academic work hours and to use a high level of mental energy in the process, if they are to succeed at academic writing. Barkley (2010) has framed engagement as a product of motivation and active learning, or learning through doing the tasks of the discipline. Little effort will be expended if students lack interest in a task or if they perceive the task as being without meaning. How can students become motivated to spend the necessary time on research, writing, and mastery of APA style? One path is through the development of a classroom community, or a classroom culture, that showcases and supports effort and persistence. It is important to invite students to talk in class about their papers in process. This not only gives instructors a chance to check on progress, but it also gives students an opportunity to model for each other their use of the tips and techniques being taught in class. Guided practice may also build classroom community. My rule of thumb is that anything taught on a given day should be
actively practiced that day. In class, my students practice writing references for journal articles and books, complete grammar and punctuation examples, develop summary paragraphs, and page through journals to find examples of how to write methodology sections or phrase transitions. They often work in dyads or small groups, checking each other’s work and encouraging each other.

Another important issue in fostering hard work involves increasing expectancy. The effort students put into a task is “a product of the degree to which they expect to be able to perform the task successfully (expectancy) and the degree to which they value the rewards as well as the opportunity to engage in performing the task itself (value)” (Barkley, 2010, p. 11). Both guided practice and rehearsal are linked to expectancy. In another example, my writing class includes two tests on APA reference and citation styles, which every student must pass with 80% or better. To pass, students must write references and citations for published works such as journal articles and book chapters without referring to the style manual or their notes, and must do so perfectly. Obtaining mastery is a painstaking process that requires multiple exam retakes and considerable at-home practice in writing references and citations; however, students emerge from this experience with the ability to readily write a reference or citation for almost any source. See Appendix B for sample mastery exam items.

Another issue in increasing expectancy involves providing rubrics for all assignments. In developing rubrics, I have often borrowed from the work of Dunn (2010) and Landrum (2008), both of whom make excellent suggestions on quantifying and qualifying student writing (also see Morgan & Morgan (2006) for helpful suggestions on constructing rubrics for writing). I provide rubrics to students long before assignments are due. They use them to structure papers, check for missing APA-style elements, and generally reduce anxiety about the process. A sample rubric may be found in Appendix C. I have also found it helpful to direct students to the presubmission checklists for student publications developed by Psi Chi (Dunn, Ford, Rewey, Juve, Weiser, & Davis, 2001; accessible online at http://www.psichi.org/pdf/presub.pdf). Unfortunately, as of this writing those checklists have not been updated for compatibility with the 6th edition of the APA style manual. They remain an excellent resource, however, and can easily be adapted by instructors. For students still struggling to hold onto all of the rules and details of APA style, this well-organized checklist can be a lifesaver. It is also a terrific tool for students who are gradually learning to edit and revise their own work. When I show students this 2-page checklist, I also and remind them that this is only part of what I look for in each of their papers.

**Following the steps**

Suppose that I now have a group of trusting, hard-working students (wow!) who are ready to follow the steps toward writing well in APA style. How can I best support their ongoing developmental process? Shulman’s Table of Learning presents an elegant summary of the process professors hope to elicit from students across all learning experiences. His taxonomy of learning depicts students in a process of “engagement and motivation; knowledge and understanding; performance and action; reflection and critique; judgment and design; commitment and identity” (2002, p. 37). A student writer in the commitment and identity stage has internalized the values of good scientific writing, and sees him or herself as an APA-style writer. To get to this place, however, it is not enough for professors simply to correct student errors in writing. The ultimate goal is for students to become self-correctors. They need to be editors and revisers of their own written work, and indeed of their own thinking, researching, and creating process. Developmentally, that is a big order. Basically, it means that students must be critical thinkers. They must approach the primary texts as critical readers, so that they can begin to construct critical writing as opposed to simple summaries in their own papers (Hillard & Harris, 2003). They must also become critical readers of their own work.

Throughout the semester, I have found it helpful to make my own editing and revising processes transparent to students. I have also offered “helicopter sessions” to students, in which I stand by the student’s shoulder as he or she sits at my computer with a paper in progress. Although I may find an error or suggest a correction, it is the student who makes the changes. Again, students who are struggling often seem to make more progress when I am coaching them and providing scaffolding through this kind of enacted critical thinking (for other scaffolding methods in teaching writing, see Bean, 2001).

The other major active learning in this developmental process of becoming self-correctors lies in the classes I call “How to Proofread, Edit, and Revise like a Professor.” Students learn an editing and revision method that involves knowing themselves as writers, using a “microscope” scan (i.e., checking details of APA-style, grammar, punctuation, and usage), and a “macroscope” scan (i.e., checking organization, meaning, and message...
delivery). See Appendix D for this handout. We then practice the method in class, using three exemplars. First, we practice as a class with a perfectly awful two-paragraph selection with two references, deliberately badly written by yours truly. Then the students practice in two-person teams, editing a selection from an actual student draft (volunteered by a brave student from a few semesters ago). Finally, students bring in their own literature review papers in progress, and courageously allow their classroom partners to edit them. These exercises seem to help students put the pieces together as they simultaneously try to track grammar, usage, citation rules, and meaning.

**Writing Matters**

At this small state-sponsored university with many underprepared students, teaching Writing for Psychology is an enormous challenge, one that requires many out-of-classroom hours for the professor. It is not a task for the faint of heart. I often spend 1 ½ to 2 hours on the first draft of each student’s paper, and subsequent drafts can require at least an hour to read and edit. It is, however, an immensely rewarding task, as it has a powerful connection to student success in the major, in our university, in graduate school, and in the workplace. It is my hope that we will see more undergraduate psychology programs instituting APA-style writing classes in the future.

**Annotated Bibliography: Teaching Writing for Psychology**

For this annotated bibliography, I’ve listed APA-style textbooks first, then books that can provide additional resources for the teacher of an APA-style writing class.

- A short guide to writing about psychology (3rd ed.). This is the textbook I use in my classes. In addition to including all necessary information needed for undergrads to understand APA style, this APA-style writing textbook has excellent checklists on revising essay-style and empirical papers. It is also a great resource for professors who wish to create rubrics.

- Writing papers in psychology (8th ed.). Another excellent resource for students, this APA-style includes particularly good tips on working with electronic databases and organizing the research process.

- Writing with style: APA style made easy (5th ed.). This APA style textbook has especially helpful grammar exercises in the “Grooming tips” chapter.

- Undergraduate writing in psychology. Excellent resource for increasing understanding of how scientific writing differs from other forms of writing. More of a conceptual resource than an APA-style textbook.

- The deluxe transitive vampire. A grammar handbook with a sense of humor, this like all of Gordon’s works, contains marvelously humorous grammar and usage examples for classes, homework assignments, and quizzes.

- Eats, shoots, and leaves: The zero tolerance approach to punctuation. Funny and accessible, this handbook is a good source of examples for classroom exercises, homework, and exams.

- The elements of style. Advanced students seem to especially benefit from reading this quietly witty classic on writing with brevity, clarity, and style; professors may also benefit from an occasional refreshing dip into its contents!
References


Appendix A

Humorous Grammar, Usage, and Punctuation Examples for Class and Homework

Affect vs. Effect

Affect = a verb. Drinking moonshine may affect your brain in a negative way.

Effect = a noun. Drinking moonshine may have a negative effect on your brain.

HOWEVER, in psychological writing, AFFECT can refer to emotion. Used this way, the word is usually accompanied by the words negative or positive as modifiers. Drinking moonshine may produce positive affect, but in the long term it may have a negative effect on your brain.

Semicolons and Colons. Use a semicolon to join two independent clauses when the second clause begins with an adverb, such as accordingly, besides, however, or thus.

INCORRECT: I wanted to be on time for class, however, the cat threw up on my jacket, and I was delayed.

CORRECT: I wanted to be on time for class; however, the cat threw up on my jacket, and I was delayed.

Use a colon after an independent clause that is followed by a list of particulars. Never use a colon after an introduction that is not a complete sentence. Pick the right sentence, or suffer the horrible consequences…

1. Writing for Psychology is: difficult, time-consuming, and possibly demonic.
2. Writing for Psychology is difficult, time-consuming, and possibly demonic.
3. Learning to write well means that you must consider three things: time management, information management, and demon management.
4. Learning to write well means that you must consider: time management, information management, and demon management.

Pronoun/Referent agreement.

WRONG: When a student becomes tired of APA style, a quick nap can be helpful to them.

RIGHT: When students become tired of APA style, quick naps can be helpful to them.

RIGHT: When a student becomes tired of APA style, a quick nap can be helpful.
Appendix B

Sample items for Reference and Citation Mastery Exams
BOOK TITLE: Current Directions in Health Psychology
BOOK EDITORS: Gregory Miller and Edith Chen
PUBLICATION DATE: 2005
PUBLISHER INFORMATION: Pearson Education, in Upper Saddle River, New Jersey
CHAPTER AUTHORS: Peter P. Vitaliano, Heather M. Young, and Jianping Zhang

1. CREATE A REFERENCE FOR THIS CHAPTER IN THIS EDITED BOOK.
2. CREATE A PARENTHEtical CITATION FOR THIS RESOURCE.

ARTICLE TITLE: The Social Psychology of Helping: The Parable of the 38 Witnesses
PERIODICAL TITLE: American Psychologist
DATE & VOLUME: September, 2007, Volume 62, Issue Number 6
PAGES: 555 to 562
AUTHORS: Rachel Manning (University of the West of England, Bristol), Mark Levine, Alan Collins (Lancaster University)
DOI: 10.1037/0003-066X.62.6.555

3. CREATE A REFERENCE FOR THIS JOURNAL ARTICLE
4. CREATE A CITATION FOR THIS PHRASE, WHICH OCCURS ON PAGE 555 (that is, write a sentence that includes the quote and makes a citation). Make sure that you punctuate correctly.

"others overwhelm the will of the individual"

ARTICLE TITLE: The Fatally Flawed Marriage
PERIODICAL TITLE: Psychotherapy Networker
DATE & VOLUME: March/April 2006, Volume 30
PAGES: 40-46
AUTHORS: Barry McCarthy, Rebecca Ginsberg, Jennifer Cintron

5. CREATE A REFERENCE FOR THIS MAGAZINE ARTICLE
6. CREATE A CITATION IN PARENTHESES FOR THIS ARTICLE. Assume that this is the first time you have cited this article in your paper.
Appendix C

*Sample Rubric – The Short Paper*

<table>
<thead>
<tr>
<th>Grading Areas</th>
<th>Grading Criteria</th>
<th>Points possible</th>
<th>Actual points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completion of Assignment</td>
<td>• <strong>Thesis Paragraph</strong> clearly states the issue and introduces the topic under study: Clear, concise, sets reader up for what is to follow</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• <strong>Article 1</strong>: Clear explanation of the evidence presented for or against “what everyone knows”</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• <strong>Article 2</strong>: Clear explanation of the evidence presented for or against “what everyone knows”</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• <strong>Conclusion</strong>: Makes a clear statement about the meaning of the evidence described.</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>ASSIGNMENT SUBTOTAL</strong></td>
<td></td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Grammar</td>
<td>• Paper was clearly proofread: no obvious errors.</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Correct noun-verb agreement &amp; pronoun-referent agreement.</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Correct punctuation.</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• All sentences complete; no run-ons.</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• No colloquialisms or contractions.</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td><strong>GRAMMAR SUBTOTAL</strong></td>
<td></td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>APA Style</td>
<td>• Paper is correctly formatted: 1 inch margins, running head &amp; page number inside top margin, 12 pt font</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• References cited correctly in text.</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Reference page is correct.</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Title page is correct.</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Writing is nonbiased.</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td><strong>APA STYLE SUBTOTAL</strong></td>
<td></td>
<td>10</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td>50</td>
<td></td>
</tr>
</tbody>
</table>

**COMMENTS:**
Appendix D

How to Proofread, Edit, and Revise like a Professor

You must search your written text for errors before submitting it to an audience. That means looking for errors that are typographical, grammatical, textual, and stylistic.

A couple of basic tips before you begin:

- Always proofread from a hard copy.
- Take a break between finishing your paper on your computer, printing it out, and proofreading it, even if it’s just a break to get a glass of water. You’ll catch more when your eyes are fresh. If you are so sick of your paper that you can’t see your mistakes any more, ask a friend to help you proof it!
- When in doubt, Read Aloud! You can catch grammar errors, run-on sentences, omitted and doubled words, and lack of transitions this way.
- Never trust your spell-check program (or a grammar-check program) to do your proofreading for you.

Think about the proofreading and editing process as involving a series of scans, some on a surface level, some on a microscopic level, and some on a macro, or wider-view, level.

1. Know Thyself. Know your most common errors, and develop ways to look for them. Run “find and replace” for your most common typos before you print out the paper in order to proofread it. For instance, I often mistype “form” when I mean “from”, so I look for all instances of “form” and correct the typos before I print anything out.

2. APA SCAN. Look for basic formatting problems in APA Style.
   a. Check font: Is it consistent throughout the paper? Is it 12 point?
   b. Check spacing: Is everything double-spaced, including the Reference page?
   c. Check tabs: Is the Abstract flush left? Do all other paragraphs begin with a tab? Do all references have a hanging indent?
   d. Check page numbers & order of material in the paper. Does your pagination begin with the Title Page? Have you included the running head and page number on every page?
   e. Check every heading for (1) meaning and conciseness, and (2) correct APA style for the level used.

3. RESOURCE SCAN. Check References and Citations.
   a. Does the Reference page start with the centered & bolded word References?
   b. Is every reference correct? Check every punctuation mark, capitalization, and italicization. Are all names spelled correctly? Are all necessary retrieval statements included, such as doi information?
   c. Is every reference in your Reference list cited at least once in the body of the paper? Look for this. Then check to make sure that the spelling and date of every citation matches the spelling and date of every reference.
   d. Are citations presented with “and” outside parentheses, and “&” inside parentheses? Are they punctuated correctly? Do they include year and last names only? Are page numbers included for all direct quotes?
   e. Make certain that sentence punctuation is correct for citations and quotes: remember that punctuation for a quote goes after the end parenthesis of the citation, unless it’s a block quote.
4. **MICROSCOPE: Check word by word, sentence by sentence.**
   a. Check for run-on sentences or missing punctuation. If there are two independent clauses in a sentence, they must be separated by (1) either proper punctuation (a semicolon or colon), OR by (2) a conjunction + comma combination.
   b. Look for prepositional phrases, introductory phrases, or adverbs starting sentences: are they all followed by a comma?
   c. Are all sentences well-balanced? Make sure that sentences are parallel, and that all verb forms in a sentence agree.
   d. Skim your paper, checking every instance where you used “they”, “them”, “their”, etcetera, and make certain that (1) all referents for those pronouns are plural, and (2) all verbs in the rest of the sentence are plural.

5. **SENTENCE SCAN. Take one step back: examine your sentences.**
   a. Check for your use of transitions between sentences. Do you have any? Do they make sense? Do they help the reader follow your point or argument? Do sentences flow from one to the next?
   b. Is there some variety among your sentences, or are they all the same?

6. **PARAGRAPH SCAN. Take a second step back.**
   a. First, check each paragraph: Eliminate any one-sentence paragraphs. Does each paragraph have a topic sentence and a clear point?
   b. Does each paragraph clearly lead to the next? Are there any disconcerting leaps? Does your paper have a coherent order?

7. **APA SCAN PART 2. The bigger picture.**
   a. Did your introduction telegraph, in order, every point you made in your paper? Does your conclusion refer back to the introduction, but go beyond it?
   b. Do you have a comprehensive narrative? Does your paper tell a story, and end with a take-home message?
   c. Does the body of your paper support your thesis? Do you offer enough evidence to support your claims? Is every claim properly documented?
   d. Have you followed Conventions of Psychological Writing?

8. **MACROSCOPE: Think like a reader, not like a writer.**
   a. Will someone reading your paper be able to follow your process of thought and understand how you have come to every point that you have made?
   b. Will your reader be able to track down your resources and to confirm every point that you have made?
On Happiness: 
Introducing Students to Positive Psychology 

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*Moravian College*  

David J. Fisher  
*Lehigh University*

Although the happy person is more likely to be from a wealthy nation and have enough resources to pursue his or her particular goals, characteristics such as a positive outlook, meaningful goals, close social relationships, and a temperament characterized by low worry are very important to high subjective well-being.

Diener, Lucas, & Oishi (2002, p. 70)

Positive psychology is the newest area of the discipline. By positive psychology, we refer to the study of things that make life worth living. The primary goal of positive psychology is to advance psychological theory and to design research and intervention strategies that truly improve people’s daily lives and enhance their well-being for future socio-emotional development.

In a relatively short span of time, this subfield has made its mark in the classroom. Books on positive psychology abound, journals have appeared, and students want to know whether this “new” type of psychology lives up to its name and promise or whether it is a full-of-hype fad. Most teachers probably will not have the opportunity to teach an entire class devoted to positive psychology, but they can certainly devote a few class lectures in whatever class they are teaching to the topic. Positive psychology is quite plastic, that is, its findings can be fit into a variety courses found in most psychology programs (e.g., introductory, social, developmental, personality, psychology of adjustment).

Within any given psychology course, we believe that the best approach for introducing positive psychology is to focus on one key topic that engages students: The nature of happiness. To positive psychologists, happiness consists of positive emotions and positive activities that enhance well-being and allow people to flourish (e.g., Diener & Biswas-Diener, 2009). A state of happiness can be marked by contentment, satisfaction, pleasure, joy, and, of course, love. There should be little surprise, then, that exploring the nature of happiness is engaging for students. Among traditional aged college students, too, questions of happiness are often bound with the search for meaning in life (e.g., Baumeister & Vohs, 2002). At one time or another, virtually everyone has wished for a recipe or rule for enhancing or maintaining their own sense of happiness.

Thus, the aim of this chapter is to provide teachers with some ideas and approaches for teaching about happiness. To place happiness in context, we begin with a very brief history of positive psychology and then review constructs that are often used interchangeably with or as key components of happiness. We then review a variety of factors or “correlates” that do (but more often do not) predict people’s happiness. Instructions for nine activities are then provided, which will encourage students to explore happiness and related psychological states in and outside the classroom. We close by considering whether and how we can be happy all the time and by providing a list of resources for instructors to learn more about happiness and positive psychology, including texts, trade books, and articles appropriate for student reading assignments.

**A Brief History of Positive Psychology**

Prior to World War II, the field of psychology had three missions: to cure mental illness, to help people live productive lives, and to nurture people’s strengths (Seligman, 2005). During the war’s aftermath, psychologists become so focused on healing, that helping people lead fulfilling lives and nurturing their strengths was forgotten. This shift in mission was understandable; military personnel returning from the war needed therapeutic help for psychological as well as physical distress. In recent years, however, a growing sense from several parts of the field--some might call it a *zeitgeist*--suggests that mainstream psychology will remain incomplete if it does not again address all three of its missions (Peterson, 2006).

While the conception of a positive psychology is new, its foundations are rooted in ancient Greece and Aristotelian philosophy (e.g., Haidt, 2006). Positive psychology and Aristotelian philosophy are closely
Many Constructs Point to Happiness

How does one define happiness? Happiness is a very complex concept made up of simpler constructs, many of which are, in turn, composed of still more elements. Fortunately, happiness is easily understood as an umbrella term under which fall a variety of related, even synonymous, terms. Researchers tend to use the term “happiness” over other constructs because it is easy to understand, represents the empirical findings well, and is easy to use due to its familiarity. Table 1 lists and defines four constructs that often serve as proxy measures of happiness. We review each in turn.

Table 1
Various Terms Used to Describe Positive States Related to Happiness

Subjective well-being – A person’s self-perception of how satisfying his or her life is, as constructed through evaluations of life events (e.g., Diener, 2006).

Quality of life – A compilation of the circumstances impacting one’s life to determine if it is a good one; usually composed of outside factors (e.g., income) but also contains subjective (psychological) elements (e.g., emotions, expectations; Diener, 2006).

Life satisfaction – The overall examination of whether one’s life is good (or not). Can be measured from birth to the present, or can be measured as the present state as assessed across all aspects of a person’s current life (e.g., Pavot & Diener, 2008).

Flourishing – A constant state of equilibrium composed of higher levels of emotional, psychological, and social well-being (e.g., Snyder & Lopez, 2007).

Subjective well-being. Subjective well-being (SWB) is a construct based on people’s subjective experiences (Diener, 2000). It is an umbrella term for an individual’s various life evaluations, both positive and negative. SWB is composed of a fluctuating ratio of positive affect (PA) to negative affect (NA), but is traditionally composed of higher levels of PA coupled with lower levels of NA (Eid & Larson, 2008). Both positive and negative affect are simpler constructs of SWB because such mood states prompt the process of life evaluation. A person is able to reflect on how satisfactory his or her life is through emotional responses to life events (Diener, 2006). The various life evaluations that contribute to SWB are observable through a person’s mental states, self-reports, and behaviors.

Quality of life. Quality of life is more objective than SWB, as it gauges all of the actual circumstances which factor into a person’s life to determine its positive or negative value. Factors outside of the individual’s control are often stressed (e.g., job placement, social status, income (Diener, 2006; Diener & Seligman, 2004); however, quality of life also encompasses the summation of an individual’s life expectations (e.g., the expectation to marry and raise a family) and emotions that relate to living a positive life (e.g., feeling satisfied with major life decisions).

Life satisfaction. Life satisfaction refers to an overall perception about one’s life and whether one is satisfied with it (i.e., a rating of life’s goodness). This element is most easily understood as a “life report card.” Life satisfaction is based on subjective beliefs (expectations, emotions) that can be influenced by objective factors (e.g., social status, education, income, profession). The term life is vague in that it is not rigorously defined as a period comprising “birth to present” or the “present only” (Diener, Lucas, & Oishi, 2002); this ambiguity can conflict with measuring life satisfaction because happiness varies depending on how one defines the term life (e.g., “life in general” vs “life right now”). Measures for life satisfaction have since instructed participants to focus on their “life in general” or “life right now” to acquire a reliable measure of happiness (see Diener, 1994).

Flourishing. There are three major components (see Snyder & Lopez, 2007) to the construct of flourishing (also known as human flourishing; see Keyes & Haidt, 2002), the first of which is emotional well-being. Emotional well-being is denoted by a state of equilibrium between positive and negative affect. Psychological well-being is composed of positive personal growth and a sense of autonomy. Finally, social well-being is described as a positive social integration into society. Therefore, flourishing
is a term used to describe individuals who build up and maintain higher levels of these three elements, which ultimately lead to a higher degree of happiness (e.g., Fredrickson & Losada, 2005).

Some Correlates of Happiness

As social psychology would suggest (e.g., Malle, 2006), people have a variety of theories regarding what leads to a happy or a good life. Some of these theories are culturally-shared. For example, people believe (with some validity) that a balance of work, relationships, and leisure time will lead to happiness and well-being (Hecht & Boies, 2009). Other theories are apt to be more idiosyncratic. One person might claim that rainy days make her gloomy while another is of the opinion that the sound of rain falling on a roof leads to pleasant feelings. Students are always very interested in learning about what factors predict happiness, if only to learn whether their naïve theories jibe with the observations found to be true through psychological research.

Detailed reviews of the relevant literature point to variables that have zero, low, moderate, or somewhat stronger associations with happiness and happiness-related constructs (e.g., Argyle, 1999, 2001; Diener, 1984, 1994; Diener, Suh, Lucas, & Smith, 1999; Eid & Larsen, 2008; Lyubomirsky, 2008; Myers, 1992; Myers & Diener, 1995; Peterson, 2006; Wilson, 1967). Table 2 lists some predictor variables drawn from these reviews that do—and do not—correlate with measures of happiness. Specifically, the contents of Table 2 fall into two categories: factors with no or very low correlations with measures of happiness (i.e., < +.30) and those with moderate (i.e., generally in the +.30 to .50 range).

<table>
<thead>
<tr>
<th>Zero or Low Correlation</th>
<th>Moderate Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>income</td>
<td>marriage</td>
</tr>
<tr>
<td>education</td>
<td>number of close friends</td>
</tr>
<tr>
<td>social class</td>
<td>religiosity</td>
</tr>
<tr>
<td>intelligence</td>
<td>recreational activities</td>
</tr>
<tr>
<td>age</td>
<td>physical health</td>
</tr>
<tr>
<td>gender</td>
<td>Individual Differences</td>
</tr>
<tr>
<td>physical attractiveness</td>
<td>low neuroticism</td>
</tr>
<tr>
<td>race/ethnicity</td>
<td>being extraverted</td>
</tr>
<tr>
<td>offspring</td>
<td>being conscientious</td>
</tr>
<tr>
<td>climate</td>
<td>internal locus of control</td>
</tr>
</tbody>
</table>

Adapted from Table 1 in Dunn and Brody (2007, p. 415)

Let’s consider the zero or low predictors first. As shown in the left column of Table 2, there are a few surprises. Being wealthier, better educated, and being physically attractive do not ensure happiness; neither does youth or living in an ideal climate. With a little reflection, many people will agree that more money or an increased amount of any material good does not necessarily lead to greater happiness (and it does not; see, for example, Diener & Biswas-Diener, 2008; Kasser, 2002), however, they may be surprised to learn that the presence or absence of offspring does not affect self-reported well-being much, either.

What about the moderate correlations, those shown in the right side of Table 2? Being married and having several close friends (i.e., both forms of social support), being religious (a lifestyle choice, as well as another source of social support), and having opportunity to take part in recreational and leisure activities (e.g., hobbies, sports) are linked with modest levels of happiness. What about physical health? That being physically healthy is of limited value when it comes to predicting happiness is quite interesting. One explanation, of course, is that the nature of the association might depend in part on how one’s health is compromised (i.e., congenital, acute, or acquired chronic problem). Another explanation—really, a set of accounts, which are beyond the scope of this chapter—is the ready manner in which people psychologically and physically adjust to their circumstances (e.g., Brickman, Coates, & Janoff-Bulman, 1978; Wilson & Gilbert, 2003, 2005). Our imaginations often posit greater burdens than reality imposes upon us (see also, Kahneman, 2000; Kahneman, Diener, & Schwartz, 1999).

Yet, as shown in Table 3, some health matters can disrupt happiness.

Table 3

<table>
<thead>
<tr>
<th>Positive and Negative Predictors of Happiness and Well-Being</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Positive Predictors</strong></td>
</tr>
<tr>
<td>Individual Circumstance</td>
</tr>
<tr>
<td>being employed</td>
</tr>
<tr>
<td>frequency of sexual intercourse</td>
</tr>
<tr>
<td>frequency of experiencing positive affect</td>
</tr>
<tr>
<td>Individual Differences</td>
</tr>
<tr>
<td>ability to express gratitude</td>
</tr>
<tr>
<td>being optimistic</td>
</tr>
<tr>
<td>self-esteem</td>
</tr>
<tr>
<td>Negative Predictors</td>
</tr>
<tr>
<td>Individual Circumstance</td>
</tr>
<tr>
<td>divorce</td>
</tr>
<tr>
<td>widowhood</td>
</tr>
<tr>
<td>unemployment</td>
</tr>
<tr>
<td>disability</td>
</tr>
</tbody>
</table>

Adapted from Table 2 in Dunn & Brody (2007, p. 416).

As shown in the lower left of Table 3, disability, such as, for example, serious physical impairment following a motor vehicle accident, can reduce
happiness (Dunn & Brody, 2008; Dunn, Elliott, & Uswatte, 2009; Lucas, 2007a, b). Other variables that can reduce happiness include divorce (Lucas, 2005; Lucas, Clark, Georgellis, & Diener, 2003), loss of employment (Lucas, Clark, Georgellis, & Diener, 2004), and widowhood. These negative predictors are balanced somewhat by other factors shown in Table 3 that are predictors of positive states. Being employed, engaging in regular sexual activity, and experiencing positive affect on a routine basis (e.g., being on a work team with talented, fun people) all predict happiness.

What about personality? The set point theory suggests that as much as half of happiness is rooted in people’s genetic ancestry (Lykken & Tellegen, 1996; Lyubomirsky, 2008). Research reveals that reasonably strong predictors of happiness include higher levels of self-esteem and optimism. More moderate predictability is associated with being extraverted, conscientious, low in neuroticism, and possessing an internal locus of control.

Any of the factors listed in Tables 2 and 3 can serve as discussion starters in the classroom. To spark reflection, an instructor might ask students to do 5 or so minutes of free writing on one or more of these factors at the start of a class. The instructor can then open the floor to student opinion. Starting with some free writing ensures that all members of the class have something to share or to consult during the subsequent discussion. And, as always, an instructor needs to select course materials that will appropriately challenge and engage students. To that end, we now turn to some activities designed to help students explore happiness in their own lives.

Getting Happy: Activities to Explore Happiness

Generally speaking, in or outside of class activities to explore happiness and related phenomena come in two broad types: writing/reflection activities and experiential/exploration activities. This categorization is somewhat arbitrary, of course, because an instructor may have students take part in a more experiential activity but then have students write about the experience. We recommend activities under each category.

Writing and Reflective Activities

Keeping a diary of what makes you happy. People have theories of what makes them happy, but they are not infallible. Indeed, various reviews indicate that we overlook the actual factors that make us happy (e.g., Peterson, 2006). Despite ample evidence to the contrary (our own experiences as well as the psychological literature), for example, many people persist in believing that money and material goods bring about happiness (e.g., Kasser, 2002). Not so. One way to help students identify those things—usually experiences—that lead to happiness is to have them keep a happiness diary for some extended period of time, say, one to two weeks. All that they need to do is to set aside some dedicated time daily where they reflect on the day’s events, taking careful note of when they experienced happiness, pleasure, or were in an especially good mood. Besides documenting their positive feelings, they should note the time, place, the activity, and who was with them or if they were alone. Once the diary is complete, the students can do a content analysis of their days, noting what factors appear to influence their happiness. They might also make note of what variables appear to be linked to less positive moods, as well. This content analysis can be written up as an overview of the actual diary entries and references drawn from the psychological literature can be used to support observations about the possible nature of happiness in the students’ lives.

Explore character strengths online. Peterson and Seligman (2004) developed taxonomy for exploring character strengths and virtues, which include qualities like humor, leadership, curiosity, kindness, and so forth. In a sense, their work was a logical response to the preponderance of works that organize and categorize negative qualities, such as depression, mood disorders, and various maladaptive behaviors. Character strengths are presumed to be somewhat trait-like; that is, they should serve as relatively stable markers of individual differences across situations. Peterson and Seligman further stipulated that character strengths should be widespread and recognizable, fulfilling and satisfying to the possessor, morally-valued, produces admiration or other positive (not negative) reactions, among other qualities (see Peterson, 2006). Finally, these strengths should be measurable thorough self-report devices (although confirmatory reports of others are not precluded). To collect data on character strengths, Peterson and Seligman set up a website where interested individuals can complete an online measure and then receive feedback on their apparent strengths and virtues. Completing the basic measure (option 1) is free, and students can write down their scores before leaving the website so they can later discuss them in class or in a reaction paper. The character strengths survey can be accessed at: http://www.viacharacter.org/VIASurvey/VIASurvey/tabid/237/Default.aspx

Let the students know that after registering to take the survey, they need about 45 minutes to
complete it. Once finished with the survey, the feedback—a listing of the respondent’s signature strengths—is immediate. Have the students jot down their strengths and then ask them to answer the following questions: Do the identified strengths feel authentic to you, that is, did you expect to be revealed by the survey? Did any of the indentified strengths surprise or puzzle you? If so, which one(s), and why? Now that you know your strengths, how can you use them in your daily life? How can they improve your daily life?

**Have a good day.** Ask students to think and then write about what for them constitutes a “good day.” Ask them to describe in one page or so (single spaced) what for them makes up a memorable and good, even great, day. Ideally, the students should either try to live the actual day and then afterwards write a reflection about it or they can describe a recent but ideal day they already lived. Remind the students to keep the parameters posed by positive psychology in mind as they describe their days. What made the day especially “good”? Why don’t we seek to have more “good” days?

**Thank someone in writing.** Gratitude—being thankful, showing appreciation—is a powerful and compelling social response, one that connects people to each other. Most of us are quite used to thanking people for the little things they do for, but we are less likely to express sincere gratitude to people for the grand and great things they have done for us. Ask students to pick someone who did them a huge and lasting favor or committed a great kindness. Then ask whether they really and truly expressed gratitude to that person at the time, as well as to consider the positive impact of the kindness even now. Invite the students to write a personal gratitude letter to the individual of their choice. Ideally, the letter should be handwritten and spontaneous; no email or formal, typed letter will do here. Peterson (2006) suggests such letter should be rich with detail that is spontaneous rather than studied, and that if possible, the letter should be delivered in a face-to-face encounter so the person can read it in front of the student. Letter recipients and writers both report being moved by the experience and tears are common, as is a feeling of happiness (Seligman, Steen, Park, & Peterson, 2005). Weiten, Dunn, and Hammer (2012) also suggest that such gratitude letters can be written to a departed family member or friend. Thus, students can still express gratitude for past kindesses even if they cannot do so directly, and research suggests that people who feel gratitude are happier than those who don’t experience it (McCullough, Kilpatrick, Emmons, & Larson, 1999; Park, Peterson, & Seligman, 2004).

After delivering the letter and seeing (or imagining) the recipient’s response to its contents, students could write a brief paper on the experience. What specific emotions did they feel? What emotions do they believe the recipient felt? What qualities make gratitude a particularly powerful and constructive element in social interactions? Should we seek to express gratitude to others more frequently than we do? Why or why not?

**Experiential Activities**

**Experience over materialism: Trying a consumer moratorium.** Positive psychologists suggest that the positive and pleasurable activities we engage in are ultimately more satisfying than the material goods we so often seek to own (e.g., Gilbert, 2006; Kasser, 2002). Giving up our tendency to be consumers can be a challenge, but some students may be willing to try to do so for a week or two and to then report on the experience. All the students need to do is to seek out positive experiences that are largely free (e.g., going to a park, playing a game, exercising, socializing with friends) and to refrain from making any consumer purchases beyond those that are necessary (e.g., food, transportation, health-related). When the material moratorium is over, the students should have an opportunity to discuss their experiences and reactions in class with their peers. Alternatively, the students could also write a brief paper on their experiences.

**Counting blessings or the good things in one’s life.** There may be some actual psychological wisdom in the recommendation to “count your blessings.” Various researchers find that looking on the bright side of life by counting one’s blessings—everyday positive events, such as greeting a close friend to sharing a meal with family—can have surprising psychological benefits (e.g., Emmons & Crumpler, 2000; Emmons & McCullough, 2003; Lyubomirsky, Sheldon, & Schkade, 2005; Seligman, Steen, Park, & Peterson, 2005). The directions for students are relatively straightforward. First, tell them not to try to list too many things—no more than three a day works fine; tracking too many reduces the impact of the exercise. Second, have the students keep their list for at least a week, jotting down their “blessings” toward the end of each day. After doing so, encourage the students to also write down why they believe the blessings they chose to record are beneficial. Are there any benefits associated with tracking the good things in our lives? Peterson (2006) reports finding that participants who kept track of such good things for a week reported higher levels of happiness and fewer depressive symptoms even six months after the record keeping exercise ended.
Focus on capitalizing on the good news of others. When it comes to sharing good news with others, do we reciprocate? In other words, we want those close to us to revel in our good fortune, but do we extend the same courtesy to them? To some extent, then, sharing good news with others requires that we become good listeners; that we attend to their news in the same way we hope they will heed and respond to our own. Gable and her colleagues argue that how people give and respond to good news can have important implications for their well-being (Gable, Reis, Impett, & Asher, 2004). These positive psychologists suggest that sharing good news with those we care about can lead to a psychological state they call capitalization when we receive a response of interest or enthusiasm. How does this work? Apparently, welcoming responses to the positive events we share creates positive emotions in us, which builds on the good feelings we already have. These feelings of mutual respect for and pleasure in our (or another’s) good fortune improve the relationship. The instructions for this exercise are simple: Students need to concentrate on responding with sincere and positive interest to whatever good news their friends share with them. In turn, as the students share good news in return, they need to observe their friends’ subsequent responses. You can have your students concentrate on capitalization for a week or so, for example, and then have them share the results of the experience in class. With luck, they may find that by listening, respecting, and responding favorably to others’ good fortunes can elicit the same response when they have good news to share.

Create a positive play list. Many students own iPods or other MP3 player devices. One feature of most of these devices is the ability to create play lists or pieces of music designed to play in a pre-programmed order. Some joggers, for example, create play lists designed to motivate them during their runs. Why not ask your students to create their own individual play lists that are designed to improve their moods? These lists can serve as background music for various activities, such as housework, driving to complete errands, yard work, and the like (note that we have declined to sanction listening to music—even positive music—while studying). The students can create and then “test” their play lists for a few days to see if ordered tunes do possess any mood-enhancing qualities. This exercise is admittedly very subjective, but it may lead to an interesting classroom discussion. Asking students to share how they conceived of their play lists during class discussion is one possibility, as is inviting the students to share copies of their lists with one another.

Do a secret good deed. This assignment is adapted from one developed by Peterson (2006): How we act when no one notices is important, and in this exercise, students are asked to do something kind—the proverbial good deed—for someone else without attracting any attention to themselves or taking any credit whatsoever. The good deed can be small—like picking up trash in a neighbor’s yard or putting a coin in an expired parking meter—but it should be done anonymously or secretly. If done for a stranger, the stranger may see the deed being done, but the student, as do-gooder, should fade away as quickly and quietly as possible. If done for a friend or a family member, the recipient should not know who performed the deed. If asked about the good deed, students should be instructed to feign ignorance and discreetly change the subject. Students should write a one-page paper wherein they describe the deed, the reason for choosing it, the recipient’s reaction (only if it was witnessed), and how the student felt once the deed was done.

Happy All the Time?

Although melancholy may well have its place in our psychological lives (e.g., Wilson, 2008), most students will express the desire to be happy all or most of the time. Is such a desire misplaced or foolish? No, not if the approach taken to promoting happiness is a moderate one. Positive psychological research suggests that happiness is more of a destination than a journey, which means students would do well to pay attention to what activities, interests, and diversions provide them with the most pleasure. Indeed, happiness may well be in the doing of things or in the experiences we seek out rather than in the acquisition of material things or in the increasing incomes some cultures encourage. Although being happy all the time is an unlikely goal (and one we might not want, anyway), we may be able to shape our lives so that we can derive psychological benefits by being happy most of the time.

Choosing Course Readings

Positive psychology has taken off as a new subfield within the wider discipline of psychology. There are now many fine books—including text books, trade books with a specialized focus (e.g., flow, finding happiness)—as well as an increasing number of journal articles that explore scientific research on what makes and keeps us happy. Several examples within are listed below, in the annotated bibliography that concludes this chapter. Besides
articles appearing in mainstream psychology journals, including American Psychologist, the Journal of Personality and Social Psychology, Psychological Science, and Perspectives on Psychological Science, there are also two journals devoted exclusively to positive psychology: The Journal of Positive Psychology and the Journal of Happiness Studies.

A good web-based source is the Positive Psychology Center at the University of Pennsylvania (http://www.ppc.sas.upenn.edu/), which lists a variety of resources for teachers and researchers, as well as updates on conferences and various links. Within the subdirectory on teaching, for example, there are a number of sample course syllabi as well as a 2007 article by Fineberg on teaching positive psychology in a seven-day unit for high school students (http://www.ppc.sas.upenn.edu/more teachingresources.htm). Finally, instructors can use a good reference work by Niemic and Wedding (2009) to select films and film clips that illustrate key concepts from positive psychology (other films, as well as suggested music selections, can be found in Peterson, 2006).

Textbooks

A straightforward introduction to the new subfield, this book is designed to serve as the primary text in an undergraduate course on positive psychology. Key studies illustrating positive psychological concepts and methodologies are reviewed:


A flexible and concise introduction to positive psychological concepts aimed at highlighting human strengths. This brief book can serve as an ancillary text in a positive psychology course or any psychology course designed to examine ways to enhance understanding and experience (e.g., psychology of adjustment, introductory psychology).


A short and focused overview of positive psychology, one emphasizing how relevant research can be used to understand stressors, health, and well-being. This book will work best as an ancillary or supplemental text in a variety of psychology courses, including one dedicated to positive psychology.


Arguably the first and most detailed textbook to appear on the nascent field of positive psychology. Written in an engaging style, Peterson links positive psychological constructs and concepts to traditional and emerging psychological topics, as well as everyday situation. Each chapter contains illustrative exercises designed to allow readers to test out ideas. Each chapter also concludes with resources (film and music suggestions, readings) and readings designed to encourage motivated readers to learn more on their own.


A comprehensive and detailed introduction to positive psychology. The book is filled with illustrative activities aimed at promoting positive emotional states and beneficial human strengths, as well as brief case histories wherein the field’s leaders explain and explore positive psychological concepts.


Trade Books

This wonderful book encourages readers to learn to savor positive moments and experiences. That is, readers are encouraged to reflect on the joys and pleasures to be found in daily experiences by learning to attend to them in particular ways. The authors outline the steps necessary to learn to savor experiences so that “savoring” can become a routine rather than an isolated or rare event. Savoring turns out to be a useful way to promote positive psychological adjustment.


A pithy overview of the authentic, engaging experience embodied by flow. The flow experience occurs any time a person is actively engaged in an activity that represents a balance between challenge and one’s skills. This book argues that flow is very much a component of the good life.


An accessible and practical text that leads readers through myriad research studies on subjective well-being, happiness, and the well-lived life. Both authors helped to create the scholarly are now known as positive psychology. This book can serve as a main text for a course or as an in-depth supplementary work for a course on positive psychology.


A broad introduction to the study of happiness, one based on a judicious mix of classical or traditional wisdom and contemporary psychological science.


This well-written and insightful book persuasively demonstrates the downside of being materialistic. Simply put, people who are motivated by material acquisition and money are much less happy than those who focus on the pleasures to be found being with others or pursuing interesting activities. A variety of clever experiments and surveys are used to support the author’s arguments.


Part self-help book, part scientific treatise, this work explains what people can (and cannot) change in their lives in order to increase their happiness. Lyubomirsky provides a variety of concrete activities, exercises, and thought experiments designed to explore and enhance happiness.


Journal Articles

Reviews experimental and survey data presenting the somewhat surprising finding that, when asked, most people report being relatively happy.


Examines psychological insights to be gained from people who report being among the happiest on standardized scales of measurement.


A creative and thoughtful article that compares and contrasts the function of positive emotions (and their qualities) with negative emotions (about which psychology already knows a great deal). Fredrickson also introduces her influential “broaden and build model of positive emotions,” which purports to explain the good to be found in experience such emotional states.


Demonstrates that expectations of what people believe leads to happiness are often misplaced due to an over-focus on perceived positive qualities. In effect, people overlook all of other qualities of circumstance that promote or maintain well-being beyond salient factors like location.


Reviews the efficacy and validity of experimental/experiential interventions designed to enhance well-being. The authors argue that some interventions can sustain well-being for significant periods of time.


References


Diversity-related experiences in the classroom can help students develop important life skills such as active thinking and perspective-taking skills, serve to enhance student engagement, and encourage racial and cultural understanding (Gurin, Dey, Hurtado, & Gurin, 2002). Focusing on issues of diversity is particularly important in psychology courses, given that diversity awareness allows students to better understand how political, social, economic, and cultural forces can affect psychological functioning (Whitten, 1993). Thinking about psychology in the context of diversity can also help students see how theories and research that ignore variation in human experience and socialization can lead to a biased and incomplete understanding of certain groups of people. Consequently, exposure to diversity can both enhance students’ abilities to critically examine psychological research and prepare students to eventually conduct their own research in a way that is sensitive to issues of diversity (Kowalski, 2000).

The American Psychological Association has recognized the importance of focusing on diversity in the classroom, and its Division Two (Teaching of Psychology) established the Task Force on Diversity Education Resources in 2006 for the purpose of providing support for instructors who want to incorporate diversity topics into their course curriculum. Instructors interested in diversity education have at their disposal numerous published articles, websites, and handbooks that describe student projects and classroom activities designed to help engage students with issues of diversity. This chapter focuses on diversity-related activities that can be used in a wide range of psychology courses. We first describe a new Internet-based student project that exposes students to cultural diversity through the use of online message board discussions with Chinese students, and we discuss how similar message board exchanges that allow students to interact with peers from different universities can be used to encourage awareness of diversity. We then provide an annotated bibliography of selected diversity-related activities on various aspects of diversity, including aging, disability, gender, multiculturalism, race and ethnicity, sexual orientation, and social class.

Reaping the Rewards of Classroom Diversity with Online Message Boards

One way to expose students to diversity is to allow them to interact and discuss course material with peers and classmates who differ from them in terms of background and life experiences. University instructors recognize the educational benefits of diverse classrooms, and one large-scale survey of faculty found that a large majority of respondents believed diversity in the classroom both helps expose students to new perspectives and serves to increase students’ willingness to examine their own perspectives (American Council on Education and American Association of University Professors, 2000).

Even though instructors typically recognize the importance of diversity, many find themselves in relatively homogeneous classrooms with little variance in terms of student ethnicity, age, religious beliefs, cultural background, and general life experiences. Fortunately, advances in technology have opened new doors of possibilities for students in all types of universities to reap the rewards of interacting with a diverse group of peers. We have found that online message boards provide a promising vehicle for such interaction.

We recently used an online discussion board in a cultural psychology course to allow American students to discuss course material with psychology students from a Chinese university. We believe the opportunity to interact with individuals from culturally different backgrounds helps students see the relevance of many topics within cultural psychology and thereby serves to further enhance student engagement with the course. Moreover, we have found that students tend to exaggerate the black-and-white nature of particular cultural differences they learn about in class. Our hope was that the opportunity to interact with Chinese peers and to discuss course material with them would allow
students to better appreciate the diversity that exists within a given culture.

Our cross-cultural message board participants were 19 American students from Missouri Southern State University and 23 Chinese students from Henan University (Kaifeng, Henan Province, China). We ran the message board for five weeks, and we required students to make a minimum of four posts per week. Students began their message board discussions by introducing themselves to each other. In these introductions, many students posted photos of themselves, their friends, and their families. We noted that our American students came to class after those initial online introductions very excited about their new “classmates” and about the possibility of discussing course material with them. Moreover, students seemed generally more engaged in class discussions after their introductions and would frequently bring up a topic in class and then say, “Let’s ask the Chinese students what they think.” This enthusiasm for the online discussions and the marked increase in the American students’ engagement with course material continued throughout the five weeks the message board discussions took place.

Although we asked both groups of students to focus the majority of their posts on topics specifically related to cultural psychology, we encouraged them to have fun with their discussions and to feel free to introduce any topic they found interesting. Among the most popular topics were discussions of cultural differences and similarities in qualities people seek in friends and romantic partners, students’ relationships with parents and teachers, and the types of life events that bring people the most joy. With very few exceptions, the students found some way to relate their discussions to theories and research findings from cultural psychology.

By the end of the five weeks of message board discussions, the majority of students, both Chinese and American, had far exceeded their required number of posts. We assessed the American students’ perceptions of their experiences with the message board with a series of Likert-type items using scales from 1 (strongly disagree) to 5 (strongly agree). Students’ responses suggested that they enjoyed their message board interactions (M = 4.67, SD = .49), that they believed the message board enriched their experiences with the course (M = 4.33, SD = .69), and that they felt more tolerant of diversity both within their own culture (M = 4.01, SD = .56) and of people from other cultures as a result of their message board experiences (M = 3.61, SD = 1.14).

We assessed the Chinese students’ perceptions of the message board with a single, open-ended question that simply asked them to write down their thoughts about their experiences with the message board. Like the American students, the majority of the Chinese students evaluated their message board interactions positively. In fact, only one reported disliking the exchanges. Students commented that their communication with the American students was “meaningful,” “very interesting and useful,” a “benefit,” and that it allowed them to improve their English and “know more about American culture.” Other students expressed that they valued being able to share Chinese culture with the American students. One student said she “found many differences,” but that she also shared “many similar ideas” with the American students. In addition, many of the Chinese students gave suggestions for future cross-cultural message board exchanges. The most common suggestion, offered by nine of the 23 Chinese students, was to extend the time period beyond five weeks to allow for continued communication with the American students. Several others expressed a desire to increase the number of students participating in the message board exchanges.

Although we designed the cross-cultural message board exchange described above specifically for use in a cultural psychology course, online message boards exchanges between groups of students from different universities can be used for virtually any psychology course to allow students to get to know and to discuss course material with peers from different backgrounds and with different life experiences. To do this, instructors could work with colleagues from universities with different types of student populations to organize a joint message board exchange. For example, two instructors, one from a predominantly White and one from a predominantly Black university, could arrange for message board discussions between their two groups of students. Similar exchanges could also be organized so that students interact with peers from different regions of the country or from different socioeconomic or religious backgrounds. Through the process of simply discussing course material, even without any specific instructions to discuss their differences, these online exchanges would give students the opportunity to be exposed to a range of perspectives they would normally never encounter in the classroom.

Annotated Bibliography

Focusing on diversity in psychology courses can be highly beneficial for students; however, incorporating diversity-related content in class can present certain challenges for instructors. For example, discussions of diversity often lead to questions of inequality, and students may react to such discussions with resistance and a dismissal of
the importance of the topic. Furthermore, some students experience sadness or even guilt about existing inequality, while others react with feelings of anger directed at members of perceived advantaged groups (Davis, 1992). One way to overcome these challenges and to ensure that students stay engaged with the topic of diversity is to keep the overall classroom mood positive with diversity-related activities that students deem to be fun. In the annotated bibliography below, we highlight activities from a number of areas of diversity that are educational as well as highly engaging and fun for students.

Gender

Sex role stereotypes and mental health. This activity is designed to illustrate the fact that characteristics generally used to describe psychologically healthy adults are more often associated with men than with women. Students work in groups to decide whether or not each of 27 terms (e.g., very logical, very direct, excitable in a minor crisis) describe a normal adult, a normal adult male, or a normal adult female. The class then examines the responses and analyzes the extent to which terms most frequently used to describe a normal adult match those used to describe a normal adult male and normal adult female. Students then discuss the double standard of mental health and its various implications for gender.


Once upon a time there was a math contest: Gender stereotyping and memory. This activity illustrates the effects of gender stereotypes on memory by having a student read one of two stories that vary only in the gender of the protagonist. That student then recounts the story to a classmate, who then recounts it to another student. After the story has been passed along through five students, the class listens to the final version of the story. Students see first-hand how gender stereotype-congruent aspects of the story are better remembered than are incongruent aspects. This activity improves students’ understanding of gender stereotyping and can also be used to illustrate a variety of topics related to memory, including primacy and recency effects.

- Ganske, K. H. & Hebl, M. R., (2001). Once upon a time there was a math contest: Gender stereotyping and memory. Teaching of Psychology, 28(4), 266-268.

Teaching about diversities: The shadow/role-play exercise. Students either shadow or role-play a person who is different from them (e.g., in terms of gender, sexual orientation, race, religion, etc.) for one day. Students then write reaction papers, give an oral presentation, and engage in class discussion about their experiences. Students’ reactions to this exercise were very positive, and many said it was an “eye-opening” experience. Although this activity originally focused on diversity among women, the author suggests it can be modified to teach about the contributions of individuals from other marginalized groups.


History of women in psychology: A time line. This activity is designed to expose students to the contributions of women to the field of psychology. Students first research the accomplishments of two or three women from the field of psychology. During class, the instructor draws a time line on the chalkboard, and each student add the name, date, and accomplishment of the female psychologist he or she researched. After a class discussion, which might focus on the relative invisibility of women in the history of psychology, students write short papers describing their reactions to the time line activity.


Cultural Diversity

The contact hypothesis: Interviewing across cultures. A group of international students (e.g., students from an ESL class or an international student organization) visits a psychology class for one class session. Students break into small groups, and the psychology students interview the international students by asking them a set of prepared questions on a given topic (e.g., social clocks, cultural comparisons of gender roles, views of abnormal behavior, treatment of the elderly). This activity exposes students to cultural diversity and can serve as a basis for future class discussions on topics such as the lack of diversity in psychological research and serving stereotypes and prejudice.

Cross-cultural sensitivity in psychology. Student volunteers role-play either a group of reporters or family members of a child from outer space who has won a spelling bee. The family members prepare for their role by reading a vignette that describes their culture’s rules for interpersonal interaction, customs, and traditions (e.g., Men are not allowed to speak directly to others and must whisper their requests to women). The reporters then interview the family members in front of the class. This activity shows the importance of being sensitive to cultural variation and can lead to class discussions of topics such as prejudice, discrimination, and cultural differences in communication style.


Teaching acculturation: Developing multiple “cultures” in the classroom and role-playing the acculturation process. Students divide into two groups, form two distinct cultures, and then venture to the other culture to experience, first-hand, the process and challenges of acculturation. Students rated this activity as enjoyable, that it helped them learn about acculturation, and that it helped them to feel empathy for individuals moving from one culture to another.


Incorporating multiculturalism into undergraduate psychology courses: Three simple active learning activities. Students learn about the importance of multiculturalism by completing three activities. In the first, students take a “verbal IQ” test in a foreign language. In the second, students read the same IQ questions, but this time in English, and discuss how multicultural factors (e.g., country of origin, religion, or SES) could influence one’s ability to correctly answer each question. In the third activity, students complete a “performance IQ test,” which involves students making an origami object. Students subsequently discuss the fairness of this IQ measure. Students were more knowledgeable about and better recognized the importance of multiculturalism after completing these activities.


Aging

Think old: Twenty-five classroom exercises for courses in aging. This article provides an annotated bibliography of 25 classroom activities related to aging. These activities are designed to help students examine attitudes toward aging and to better understand a variety of issues encountered by older adults. Although initially designed for courses on aging, these activities can be used in developmental courses and any psychology course that covers stereotyping and prejudice.


Investigating attitudes toward older adults: The importance of cross-cultural sensitivity in psychology. Students ask four other students from outside of class to list the first terms that come to mind when they hear the phrase, “old person.” Students then return to class and write their participants’ terms on the board, and the instructor prepares a frequency count of each term. Using a majority vote, students determine if each term is positive, negative or neutral and then discuss their findings in terms of attitudes toward older adults.


Psychological implications of infantalization: A class exercise. This activity is designed to help students challenge their own stereotypes and misconceptions of the elderly by treating them like small children, just as many older adults, who are dependent on others, are often treated. For example, the instructor asks students to color with crayons, talks to them in a high-pitched voice, scolds them, and praises them as if they were children. Afterwards, students expressed feelings of humiliation and reported that they had a better understanding of how such treatment can negatively affect the wellbeing of elderly individuals.


Fostering insight into personal conceptions of the elderly: A simulation exercise. Students engage in a role-playing exercise by dressing like and simulating the physical limitations (e.g., through the
same-sex housing and procreate only through the instructor first asks students to imagine they understand the experiences of gay men and lesbians, spaceship exercise. To help students better students to consider how they would go about living public displays of affection, but are otherwise very alien inhabitants strictly prohibit and punish any artificial insemination. The cultural norms of the earthling lifestyle, feel that they would maintain the aliens’ way of life, and how they would feel about their situation. Students overwhelmingly reported they would maintain the earplugs) of the elderly for five consecutive hours. Students then write about and discuss their experiences, including their responses to others’ reactions to them. Students found this to be an educationally valuable activity that increased their empathy for the elderly.


Sexual Identity/Orientation

Promoting increased understanding of sexual diversity through experiential learning. To better understand the challenges of coming out faced by lesbian, gay, bisexual, or transgendered (LGBT) individuals, students wear lapel pins that show support for the LGBT community for three days and then write reaction papers and discuss their experiences with classmates. Students found the activity to be challenging but reported that it helped them to more fully appreciate the various difficulties faced members of the LGBT community.


“I’m glad I’m not gay!: Heterosexual students’ emotional experience in the college classroom with a “coming out” assignment. Heterosexual students write a “coming out” letter to another person. These letters are not mailed, but are used to spark class discussion about the feelings students experience while writing the letters as well as to enhance hetero-sexual students’ empathy for members of the LGBT community.


Lessons about gay and lesbian lives: A spaceship exercise. To help students better understand the experiences of gay men and lesbians, the instructor first asks students to imagine they landed on a plant inhabited by aliens, who live in same-sex housing and procreate only through artificial insemination. The cultural norms of the alien inhabitants strictly prohibit and punish any public displays of affection, but are otherwise very similar to the earthlings. The instructor then asks students to consider how they would go about living in the new culture, whether they would adopt the aliens’ way of life, and how they would feel about their situation. Students overwhelmingly reported that they would maintain the earthing lifestyle, feel negative emotions about their situation, and hide their romantic activity. The class then discusses how the scenario they imagined parallels that of gay men and lesbians in the United States. Afterwards, students reported feeling better able to empathize with individuals facing intense discrimination and having gained insight into how gay men and lesbians may feel stigmatized.


A classroom activity exploring the complexity of sexual orientation. This activity encourages students to think critically about the process of defining sexual orientation. Students first work alone to categorize the sexual orientation of 10 fictional individuals, whose stories include information that precludes simple categorization. Students then engage in a class discussion of their categorizations. This discussion is designed to allow students to recognize the difficulties and complexities associated with defining sexual orientation. Students rated this as an enjoyable activity that helped them to better understand issues related to sexual orientation. This activity can be used in a variety of courses including Psychology of Women, Sexual Behavior, the Psychology of Sexual Orientation, and Abnormal Psychology.


Learning and Physical Disabilities and Psychological Disorders

The effects of labeling. In order to better understand how diagnostic labels can influence interpretations of others’ behavior and motives, students read a description of an individual that was supposedly written by a clinical psychologist while the individual was a senior in high school. Half the students are then told that the individual is now a mental patient in a state hospital, while the other half are told he is a graduate student. Finally, students answer questions related to the predictability of the individual’s outcome, and most believe they would have predicted it, regardless of the outcome.


Experiential activities for generating inter-personal empathy for people with developmental disabilities. Students engage in three exercises designed to allow them to better understand the
experiences of individuals with developmental disabilities. In the first exercise, the instructor gives activity instructions in a foreign language or with missing words to simulate the experience of language difficulties. In the second exercise, students experience motor difficulties by writing on the blackboard with their hands in paper bags. In the third exercise, students simulate the discomfort some individuals with developmental disabilities feel related to personal space by conversing with another person either nose-to-nose or several feet away. A follow-up class discussion focuses on the students’ newfound understanding of the challenges faced by the developmentally disabled.


Biography and role playing: Fostering empathy in abnormal psychology. Students research a given psychological disorder and then write a biography of a fictional character diagnosed with that disorder. Students then role-play those characters in class and engage in a follow-up discussion of their role-playing experiences. Students who completed a pre- and post-test measure of empathy showed increases in levels of empathy for others after completing this exercise.


Integrating disability awareness into psychology courses: Applications in abnormal psychology and perception. Students complete a simulation exercise and three classroom activities designed to enhance empathy for individuals with physical and developmental disabilities and learning disorders. For the simulation, nondisabled students spend a day with a visual impairment (with the use of special glasses designed to block the central portion of the visual field), a hearing impairment (using earplugs), a motor disability (using crutches, a wheelchair, or a hand splint), or a psychological disability (not talking for the day). The classroom activities involve having students attempt to take notes from overhead transparencies projected backward (to simulate dyslexia), instructing students to speak while avoiding words containing the letter e (to simulate expressive language disorders), and asking students to draw a line in a maze while looking at the maze in a mirror (to simulate a learning disorder).


Social Class

Privilege walk. Students stand in a single line (blindfolded, if desired) while the instructor reads a series of statements that reflect various types of privilege (e.g. “You grew up in a house owned by your parents.”), and students take a step forward for each statement that is true of them. After the instructor reads the last statement, students examine where they are positioned relative to their classmates and then engage in a class discussion of how social class, gender, ethnicity, and sexual orientation-based privilege affect their lives.


Measuring attitudes toward public assistance. Students complete Anderson’s (1965) 16-item measure of attitudes toward public assistance and anonymously submit it to the instructor. The instructor then calculates scores and reports the mean score and range to the class. Example items include, “Most people on public assistance are needy, not greedy,” and “Public assistance programs are serving to weaken the backbone of our nation.” In addition to being a useful exercise for illustrating issues of measurement, this scale can be used as the basis for a class discussion about attitudes toward those who are economically dependent on others.


Application of attribution theory to the social issue of homelessness. This activity allows students to consider issues related to homelessness in the context of attribution theory. Students first divide into groups, and the instructor assigns groups to role-play either representatives of New York City, who believe the homeless are mentally ill and should be evicted from the subways, or a group of homeless people, who believe the homeless are not mentally ill and should be allowed to sleep in the subways. Groups work together over several class periods to use what they know about attribution theory to put together arguments supporting their respective positions. Finally, the groups engage in a mock citywide hearing in class and write reaction papers about their experiences.

Unveiling positions of privilege. A hands-on approach to understanding racism. The instructor divides students into groups, gives groups either elaborate or paltry building materials, and asks students to use those materials to construct mobiles. The activity concludes with a class discussion about students’ reactions to being in a situation with either ample or limited resources and how those experiences relate to issues of race privilege and institutional racism. Some White, middle-class students reported being “jolted” by this activity into a greater understanding of their own positions of privilege within society.


Racial/Ethnic Diversity

The socially awkward question: A simulation exercise for exploring ethnic and racial labels. This activity encourages students to explore the meaning behind the racial and ethnic labels they apply to themselves and others. The format of the activity is one of a guessing game in which students speculate about their classmates’ cultural and ethnic backgrounds. Students write down what they would label themselves and how they think others would label them and then discuss the labels they chose for themselves versus other students’ perception of their race or ethnicity. The activity is meant to stimulate conversation on the social construction of race and the interaction between labeling and identity.


Teaching about unintentional racism in introductory psychology. Students read a case study about interactions between a Black student, who fails a course and a White professor, who mistakenly attributes the student’s failure to lack of academic skills and motivation. Students then discuss whether or not the professor acted in a racist way. Issues related to multiple definitions of racism and treating people in a color-blind way typically come up in these discussions. During the next class period, the prior discussions are related to a lecture on unintentional racism and the fundamental attribution error. Students found this exercise interesting and reported that it helped the better understand unintentional racism.


Asian Americans and the model minority myth. This activity is designed to dispel the “model minority myth” many Americans hold of individuals of Asian descent. Students wear cards on their backs with phrases such as “successful in school” and “church soloist,” that are generally positive but that are associated with racial stereotypes. Students interact with classmates, who treat them as if the phrases are accurate descriptions, and students try to guess the ethnic group associated with the stereotype on their cards. Follow-up discussion focuses on the potential negative effects of positive stereotypes and diversity within the Asian American population.


Playing "Sherlock Holmes": Enhancing students’ understanding of prejudice and stereotyping. Students read a list of descriptors, such as “knows the function of a car’s pistons,” “is a country and western music fan,” or “has cried over a movie in the past 6 months” and nominate other classmates that they think may represent that description. Each student then reveals whether or not the descriptors their classmates chose for them are accurate. Afterwards, the instructor asks students to consider the factors that influenced their nominations and the accuracy of their assumptions. Students rated this activity positively and reported that it enhanced their knowledge of the negative impact of stereotyping.


References


Almost since its inception, psychology has addressed issues of peace and war. Individuals such as William James, B. F. Skinner, and Carl Rogers endeavored to use their knowledge of psychology to tackle a myriad of complex problems associated with mass violence. In fact, Rogers was nominated for the Nobel Peace Prize in 1987 for his work on international peace projects in Northern Ireland and South Africa. Today, many psychologists work around the globe endeavoring to reduce violence and build more peaceful communities and future psychologists can now receive graduate training in peace psychology.

Although peace and conflict resolution education has filtered into the primary and secondary educational levels as well as the graduate level, this same information has been slower to integrate into the undergraduate curriculum (Harris, 2007; Jin, 2007). Regardless, many psychology faculty members have an interest in integrating psychological aspects of peace, war, and international relations into their courses as well as a desire to offer entire specialized courses on these topics for their students (Murphy & Polyson, 1991).

As psychology has contributed substantially to the development of peace education, we are uniquely suited to fully integrate topics such as the causes, consequences, and prevention of human cruelty, violence, conflict, terrorism, and war and conversely, effective conflict resolution, forgiveness, reconciliation, mediation, and peace into the curriculum. However, Nelson and Christie (1995) argued that it isn't simply enough to merely add material related to peace and conflict into the curriculum. Rather, teachers need to engage students actively in learning about peace as a means to develop critical thinking and values about peace as well as learning more peaceful behaviors (e.g., prosocial behavior; cooperative problem solving) and methods of constructive conflict resolution.

Unfortunately, although there is a broad theoretical and review literature related to peace education, few studies have been systematically conducted exploring the effectiveness of classroom activities designed to teach about issues of peace and conflict. In this chapter, we provide a mix of activities designed for student engagement grounded in our experience in the classroom and the literature.

**Activities**

**Conflict Resolution Skills Workshop**

Describes the Coleman Raider model, which is used in a workshop format to teach basic conflict resolution, negotiation, and mediation skills. Discusses the methods of teaching these skills, course objectives, and includes learning activities. Students develop both a conceptual and experiential understanding of various methods to conflict resolution from competitive to cooperative approaches.


**Genocide Case Analysis**

To counter the idea that genocide is simply the result of hate caught aflame, students analyze an instance of genocide focusing on the stages of genocide and the psychosocial factors involved both prior to and during a genocide. Students are provided with a psychosocial model of genocide and background information about particular genocides. Students study these materials and then engage in active group discussions and write case analyses.


**Holocaust Course**

Describes a course designed to teach about the psychology of the Holocaust. Includes information about activities used in the class and learning
outcomes by topic (e.g., altruism, prejudice, and social identity).


Incorporating Online Hate Sites into Peace Psychology Classes.

Hate-related websites can serve as examples of social psychological theories in action—albeit for destructive purposes. By exposing students to online hate sites, students become aware of the threat these groups pose to world peace. To better understand these sites and formulate means to counteract their influence, students are asked to conduct an analysis to determine the social psychological theories at work, recruitment strategies employed, and best means to minimize the impact these sites have on individuals.


Integrating the Topic of Terrorism into Introductory Psychology

Discusses methods of integrating information about the psychology of terrorism and its aftermath into an introduction to psychology course. Designed to help students discuss and process the events surrounding a terrorist attack.


Interview Concerning the Teaching of War & Peace

Focuses on the benefits and challenges of teaching courses related to the psychology of mass violence and peace. Includes descriptions of classroom activities such as a demonstration landmine designed to highlight the stressors associated with work in defusing as well as living around landmines. The landmine activity can be supplemented with a chapter written by Cox and Langholtz (1998).


Native People as Mascots: In Whose Honor?

The following activity proposed by Scott Plous focuses on making students aware of the everyday racism that permeates the culture through the use of sports mascots. Although this may seem to be unrelated to war and peace, the process of dehumanizing the “other” is a fundamental antecedent of violence and is often a component of denial of past atrocities. Students come to understand the relationship between common cultural images of the “other” and patterns of racism but also, the role of trivialization and dehumanization of victims in perpetuating a legacy of violence against victim groups.


Peacebuilding Project

Students often believe that peacebuilding involves large-scale endeavors to bring peace to an entire region. This exercise is designed to highlight the reality that peace is often accomplished not by sweeping treaties but rather by the collective effect of numerous small-scale efforts over time. The goal is for students to design a small peacebuilding project or activity that could actually be implemented. Student draft a proposal including key participants, proposed program, potential sources of funding, etc. This proposal is addressed to a specific person—an individual who may not be the most recognizable within an organization or government but rather who would be best able to facilitate the project. Over the past several years, our students have selected a range of projects both local and global (e.g., a Chechen refugee camp activity program for adolescents and a local high school diversity project).

**Persuasion and War**

Describes a social psychology class project in which students learn about persuasion techniques and then evaluate the use of those techniques in war propaganda and materials produced by the U.S. military's Psychological Operations division (PSYOP). Students evaluate a range of media from print to radio and historical periods from the Holocaust to the wars in Iraq and Afghanistan. Students learn about various influence techniques, the difference between persuasion and propaganda, and methods of message inoculation.


**Role-Playing Exercises to Confront Prejudice**

One powerful antecedent of mass violence is stereotyping, prejudice, and discrimination. Much of the social psychological literature is devoted to exploring antecedents to prejudicial behavior. Unfortunately, relatively little has been published regarding strategies to reduce stereotyping, prejudice, and discrimination. The following articles explore role-playing activities designed to enable participants to address prejudiced comments.


**Survivor Interview**

Survivors of atrocities such as the Holocaust and the Rwandan genocide as well as victims of war around the globe are often available to speak to a class and answer questions. Such first person accounts engage students in a way to learn about war, ethnopolitical conflict, and genocide that cannot be achieved through simply reading about events. It is important however that such interviews be done with care and arranged through organizations with speaker’s bureaus. Often students may volunteer individuals that they know but these potential speakers may experience unanticipated emotions while presenting or drift into non-related political discourse. The United States Holocaust Memorial and Museum (USHMM) sponsors a speaker’s bureau and has published guidelines for survivor presentations. These guidelines are easily adapted for non-Holocaust related speakers. Additionally, the USHMM makes available a spectrum of resources and activities for those wanting to integrate Holocaust lessons into their teaching ([http://www.ushmm.org/education/foreducators/lesson](http://www.ushmm.org/education/foreducators/lesson)).


**The Wars in Afghanistan and Iraq: Teaching Resources and Essential Questions**

The New York Times has created a series of lesson plans associated with the wars in Afghanistan and Iraq. Each lesson plan includes a list of resources, materials, activities, discussion questions, and homework. For example, an activity listed in the lesson plan entitled “Terror on Trial” suggests dividing the class up into small groups charged with researching countries which have been accused by the United States, of sponsoring terrorism (e.g., Cuba, Iran, Iraq, Libya, North Korea, Sudan, and Syria).


**Video Games Project**

According to Singer (2010), the video game *Modern Warfare 2* grossed $310 million dollars in sales within two days. Video war games are best sellers with millions choosing to play war within the comfort of their home each year. However, the military also uses video games for everything from recruitment to robot control training for demining. In this exercise, we bring a war video game into class. We discuss the structure of the game in relation to social psychological topics such as deindividuation, dehumanization, social role theory, social identity, and aggression. We also discuss the disparities between the presentation of war in a video game context versus war in a real-world setting.


**Resources**

**Free Edited Peace Psychology Textbook Chapters**

Excellent text highlighting the many facets of peace psychology. Text is divided into four main...
sections. The first section includes chapters concerning direct violence examined from a psychological perspective. Topics range from an analysis of intimate violence to a discussion concerning weapons of mass destruction. The second section addresses issues involved in structural violence such as social injustice and globalism. The last two sections concern a broad spectrum of issues related to peacemaking and peacebuilding. Originally published by Prentice-Hall.


Handbook on Peace Education

Includes a significant amount of information related to teaching peace from a psychological perspective. Many chapters are written by prominent peace psychologists, with chapter titles such as “What does peace psychology have to offer peace education,” “Intergroup contact: Implications for peace education,” and “Contributions of developmental psychology to peace education.” Consisting primarily of theoretically based chapters as well as reviews of the literature, the text includes references to various classroom activities. Good reference text for anyone wanting to infuse material related to peace and conflict into any psychology course.


Information Resources on the Psychology of Peace and Mass Violence

These two resources contain annotated bibliographies of material related to genocide, torture, human rights, ethnopolitical conflict, terrorism, and peace written from a psychosocial perspective. Information concerning books, journal articles, book chapters, and Internet resources are organized by topic. Resources also include bibliographies of supplemental background reference materials and list of relevant journals.


Instructional Resources on the Psychology of Peace and Mass Violence

Consists of resource materials for developing whole courses and lectures on peace and mass violence. Provides lecture suggestions with selected references for integrating specific topics into the psychology curriculum. Includes sample syllabi for entire courses related to topics such as war, genocide, terrorism, altruism and aggression, the Holocaust, and peace. For incorporating specific topics into existing courses, lecture suggestions and selected references are given. Includes information concerning relevant videos, Internet resources, and professional organizations.


Peace Education Text

Chapters focus on an array of topics from the conceptual basis of peace education to assessment of programs. Includes a section devoted to peace education around the globe and programs designed to mediate violence in regions such as the Middle East, South Africa, and Northern Ireland. These chapters are particularly useful in stimulating discussion on topics such as intergroup behavior, conflict resolution, and reconciliation.


Caveats and Conclusion

Both teaching courses related to peace and war as well as integrating material related to these concepts into existing psychology courses can be very gratifying and rewarding. We would be remiss, however, if we did not include a bit of cautionary advice.

War and peace are potentially very political topics for both students and teachers. To avoid challenges associated with accusations of political bias and potentially volatile classroom situations, one should keep in mind the following recommendations.

1. Stay grounded in the research and scholarship on the various topics. Much of peace psychology is grounded in social psychology, particularly research related to social influence, social
relations, and social cognitive factors. Additionally, teachers can draw on research related to military psychology, ethnic and minority relations, international relations, sociology, anthropology, and political science.

2. Mix up examples from history. Although it is tempting to always focus on current wars and events, these may be too emotionally or politically charged for students to engage in critically. For example, students may react negatively if your primary example for discussing groupthink is the decision to go to war in Iraq. However, other examples from history (e.g., the Bay of Pigs decision) may be less threatening. If students make the connection to current events, you can use this as an opportunity to have students evaluate the situation using the tools provided in previous discussion. For example, if students bring up the Iraq war decision, you can use that teaching moment to evaluate the Iraq war decision, the media coverage suggesting groupthink (e.g., from the NYTimes), and the application of the concept. For almost every topic, you can step back a couple of decades. Thus, if one is concerned about analyzing a current war situation, one can instead analyze prior wartime scenarios. For example, in discussing the effectiveness of threats and sanctions, one need not talk about current "hot topics" but can look at research analyzing the problems associated with threats and sanctions in general and in relation to their use during the Vietnam War.

3. Be respectful and encourage students to be respectful of others' opinions as well. It is important that you know your own biases so that you can work to keep them out of the classroom. Ideally you will want to create an environment whereby student know that they can state their opinions but also know that they must back up their opinions with research and scholarship.

4. Work with your departmental chair and university administration if you are teaching a course or material that may be construed as controversial. Bottom line is that it pays to know the institution where one teaches and the cultural standards. Preparation before you teach the course or module and examining potential pitfalls can save you a fair amount of stress down the road.

Caveats aside—the psychology of war and peace should be an integral part of the curriculum that not only shapes what our students know but how they interact with the world. If our students are to become global and socially responsible citizens and potentially future psychologists, it is imperative that they learn about peace from the intrapersonal to international level.

References


Nonverbal Communication

Don W. Stacks  
University of Miami  

Mark Hickson III, Jessica Deyo, & Price Walt  
University of Alabama-Birmingham

To many people, nonverbal communication focuses primarily on kinesics (gestures and facial expressions) that are frequently referred to as body language. Few realize that nonverbal communication also includes the use of time, space, and territory, physical appearance, the use of the voice, touching behavior, and olfaction. It is largely responsible for the emotional “meaning” attributed to a message. As such, nonverbal communication functions as a multiple message, multiple channel of communication that creates norms of expected communication or communicative behavior. Not all behavior is nonverbal communication, but most of what we call nonverbal communication yields normative expectations that are either met or violated.

When introduced to nonverbal communication many students say they “already knew that,” but when pressed cannot explain why they knew what they thought they did. The sources listed below provide activities and research replications that provide insight into what nonverbal communication is and the expectations that we have in our daily communication. Where possible (and many of the earlier published studies would not pass IRB approval), observational studies are provided.

Following an introduction about the relationships between verbal and nonverbal codes that comprise almost all human communication, the authors provide sources for each of the nonverbal subcodes. These subcodes represent how we communicate through space and territory, our physical appearance and dress, kinesics, the voice, the use of time and olfaction. The relationship between these subcodes can be explained in several ways, from a functional approach whereby we look how each operate to a social approach that begins with self presentation and moves to “larger” venues, such as space and territory or time. A more complete explication can be found in Moore, N. J., Hickson, M., & Stacks, D. W. (2010). Nonverbal communication: Studies and applications (5th Ed.). New York: Oxford University Press.

Other approaches to the study of nonverbal communication can be found in the following volumes, each of which takes a slightly different approach:


It should be noted that each of these texts have suggested activities tied to textual materials that can be used in the classroom.

NonVerbal/Verbal Relationship

Verbal and nonverbal communication differ in many ways. While verbal communication can refer to itself (we can talk about a spot left by a spot remover), nonverbal communication is more immediate (what does a smile “mean”)? Verbal communication is not restricted to the immediate (we can talk about the past or future), while nonverbal communication focuses on the present. And while verbal communication is often perceived as intentional and manipulated, nonverbal communication is often seen as unintentional and “true.” Students are often aware of their verbal communications much more than their nonverbal.

The following exercise brings those differences into play and serves as a discussion starting point.


A reader of various nonverbal communication articles grouped by subcode.
  An exercise book that provides the student with an idea of how stereotypes are created and their informational and predictive values.
  A set of evaluative measures across the nonverbal subcodes is found in this source.
  Although old, this book provides a number of activities across theory and practice areas of nonverbal communication engaging students in their own interpretations of nonverbal communication in general and specific subcodes in particular.

Subcodes

Proxemics: The Spatial Dimension of Territory and Personal Space

All nonverbal communication occurs in some sort of space. That space has been defined two ways—as the territory the individual carves out for herself and as the amount of space within that territory in which she feels comfortable communicating with others. Territory ranges from public—open to all—to body—that which is the most inviolate of all. Personal space is that “bubble” or “sphere” that surrounds your body in interaction and is defined in terms of privacy or intimacy; it ranges from public—open to all—to intimate. Both territory and personal space are highly influenced by a number of variables, including sex, age, culture, status, physical appearance, and so forth.

Classroom activities that demonstrate this dimension range from projective tasks, such as doll placement studies, to violations of spatial expectations. Outside of class activities should avoid violation of spatial norms and focus on observation of territorial claims or spatial distancing while attempting to explain how the norm was established.

Annotated Bibliography

Environment and Territory

Provide the metrics for environmental analyses that influence communication on three dimensions of self-presentation, power, and instructional information. First, self-presentation and identification (how you set up your environment) influences others perceptions of you. Regulation and the relationship to others (through the environment we establish, for instance) communicates power on how an office is structured. Third, the display of instructional information, which represents the placement of objects in the environment, establishes perceptions of credibility or knowledge or personality. This task can be administered in the classroom as one environment and territory and then in other environments (dorm, apartment, home, etc.).
  Classic study that examines perceptions of personal space through the use of dolls dressed according to different cultures.

Personal Space:

Classroom Assignment. Using dolls of varying races, sexes, and dressed in different cultures, have students place the dolls in interaction spaces and then measure the distances they observe between the dolls. Doll placement studies correlate highly with actual personal spacing preferences.
  Examines how violations of personal space affect perceptions of credibility and influence in a non-laboratory context.
  Examines how body build (height and weight) impact selection of personal spacing between interactants.
  Examines how an individual’s gender influences personal spacing expectations and outcomes.
  A classic book that examines how personal space expectations and manipulation impact an individual’s communication style.
A classic study of how personal spacing and territorial claims in a small group setting impact communication and outcome.

**Haptics: The Zero-Space Dimension of Touch**

The most inviolate of all nonverbal dimensions is that of touch or, as Moore, Hickson, and Stacks (2010) note, it may be called “zero Proxemics” (p. 55). Also referred to as “haptics” or “tactics,” touch is a difficult dimension to work with in the classroom. Indeed, in terms of either classroom activity or outside research-type activity, observational assignments are best assigned and conducted in or out of the classroom. As with proxemics, there are a number of variables that influence touch norms. Sex, age, and culture may be most influential, but status and behaviors that substitute for touch can be examined, particularly when examining expectations.

These sources provide a measure of touch avoidance. Students complete the measure and use it to discuss how their understanding of their own touch expectations and substitutions impact on their daily relationships.


A study that examined the impact of simple touch and how it leads to compliance and perceptions of others.

**Physical Appearance: The Social Dimension of Body and Artifacts**

Physical appearance is often the first thing people observe when meeting people. Physical appearance is a social dimension—that is, it is something that we instinctively associate with interpersonal attraction, socioeconomic status, and success. This dimension can be broken into several important areas: body shape and size, physical appearance and attractiveness, and the use of artifacts (body alterations such as hair, cosmetics, tattoos, body piercing, clothing, and accessories). All impact the first impressions we have of others.


A classic example of how people perceive where touch is appropriate or inappropriate.
Classroom Assignment: Have students complete the body image fixation measure and then replicate with videos of soap operas and then discuss how body image demonstrates the effect of stereotyped role models.

Physical Appearance & Attractiveness
An area of interest to students is dealing with physical appearance and stigma, typically attributes associated with appearance and attractiveness that detract from initial impressions. Stigmas include being too short or too tall, too obese or too thin, or who have disfiguration. The original work on stigmas stems from Goffman (1963), but there have been several studies that can be used to structure discussion around the problems associated with body type, appearance, attractiveness, as well as social role stigma that are not within normative expectations.


Different spatial expectations found based on whether someone has a social stigma or not.


The classic study on how stigmas influence interpersonal communication.

• Merrill, E., & Grassley, J. (2008). Women’s stories of their experiences as overweight patients. Journal of Advanced Nursing, 64, 139-146.

A qualitative study of how a physical stigma impacts other’s perceptions of a stigmatized individual.

Classroom Assignment. Create a scenario where two people are interviewing for a job and the student is to decide which to hire. In one case, the individual is overweight and in the other the individual is underweight. Which would they choose and why? (Do they compare against the “average” weight individual?)

Artifacts
The effect of clothing choice has an impact on stereotypical judgments of such things as success, status, prestige, and attraction. Although it may seem contradictory, interpersonal impressions are based on such things as hair, clothing, or jewelry have not changed much over time. Discussion around artifacts can be conducted around interpersonal or professional (e.g., interviewing) expectations and behaviors.


A study of how cigarette and pipe smokers are perceived by others in terms of sameness, attraction and credibility.


This study examines the degree to which individual tattoos and body piercings impact others’ attitudes and interpretations of behavior.


The classic on the impact of dress in the business world and how dress impacts interpersonal decision-making.

Classroom Activity. Have students discuss the role of personal tattooing in self-presentation.


A classic study that examined the power of uniforms in compliance-seeking situations.


A study that reinforced the findings that less attractive and low authority people are not complied with as much as attractive and high authority people.


A study that found that helping or not helping a victim was related to the victim’s attractiveness.

Kinesics: The Movement Dimension of Body Language
Kinesics, or more commonly known as “body language,” is the study of the body as it communicates to others. Although usually associated with gestures, kinesics also includes facial expression, eye behavior, and gross body orientation such as forward lean and posture. Kinesics is influenced by a number of variables, such as sex, culture, age, handedness, and language. The study of kinesic emblems (substitutes for words or phrases in language, usually 60-90 per culture) is about as close to semantic analysis as is possible in nonverbal communication, while illustrators are gestures that supplement or complement the verbal stream of communication. Kinesics also includes the study of affect displays (specific emotions and their intensity).
behaviors and then lead the discussion of what such behaviors may indicate in terms of expected behaviors.


A classic study of reactions to others based on pupil size.


A study of gaze that finds differences for males and females initial gaze location and time spent on body region.


A study that found differences for smiling behavior in responding to a stranger and that males wearing sunglasses invoked more responsiveness for males than females.

### The Vocal Dimension of the Voice

The study of the voice and vocal expression are closely related to kinesics. Paralanguage (sometimes referred to as “vocalics”) refers to how we say words or do not say anything in a conversation. Communicators’ use of voice is often complimentary to, or contradictory of, the semantic, verbal message being communicated. As such, paralanguage can be examined from its sound and articulation (vocal qualities) and from its functional use, such as self-presentation, impressions based on stereotypes, interaction control (conversational “synchrony”), and one’s interpersonal relationship with another person with whom he or she is interacting.

A set of general and vocalic specific rating scales can be used by students to evaluate one another’s conversation skills as it relates to how they use their voices. A good way to introduce the concept of paralanguage and its impact on conversation.


* Classroom Assignment: Students enjoy discussing and demonstrating quasi-courtship behaviors. Demonstrate several quasi-courtship behaviors and then lead the discussion of what such behaviors may indicate in terms of expected behaviors.


A classic study of reactions to others based on pupil size.


A study of gaze that finds differences for males and females initial gaze location and time spent on body region.


A study that found differences for smiling behavior in responding to a stranger and that males wearing sunglasses invoked more responsiveness for males than females.
which are appropriate stereotypes and how they may have changed over time.


What impact does the type of voice have on perceptions of the source? This study found that there are 11 different types of voice that range from good (1 voice type) to bad (10 voice types). Obviously, people hold stereotypes based on the voice-type a person employs. Discussion can be facilitated around what these voice-types are and their intentional use.

**Classroom Activity.** Using Heinberg’s (1965) 11 types of speech examine a soap opera and a comedy for use of the voice to establish stereotypical behavior. Discuss how the voice can be manipulated to imply a particular personality type.


Examine how the use of the voice can structure conversations.


Examined the impact of nonfluencies on newscasters’ competence, trustworthiness, and dynamism.


Vocal pitch variation and time spent talking were found to be related to liking and disliking in an initial interaction among strangers.

**Chronemics: The Covert Dimension of Time**

Chronemics is the study of how we use and structure time. It is a subcode we take for granted. But, it has been important from sociological and anthropological approaches to nonverbal communication since at least 1959. Time orientations and structures are influenced most often by culture or subculture (Hall, 1984).

This source provides an interpersonal perspective on individual use of time. It provides a measure of time orientations and is a good way to discuss of how time impacts decision making as well as how the perception of time differs, depending on one’s culture chronemics expectations.


This study breaks time into different levels and codes. It proposes that chronemics can be studied as a structured “language,” similar to kinesics. Discussion focuses around what is time and how we orient to it.


This source provides a classification device that shows a visual relationship between ideas, concepts, or variable of time. Discussion may focus on relationships between time and ideation.

**Classroom Activity.** Have students get into groups and discuss how knowledge of a person’s chronemics orientation impacts on expectations of behavior. For instance, if someone is always early to an event or party, what sort of problems might that create? How would the students overcome this chronemics orientation? Discussion of regional or cultural differences in time orientations can evolve from the activity.


A study of how time affects perceptions on the job finding that future orientations toward time were related to more job satisfaction.


An article that focuses on the microstructure of time through the study of chronemics processes and duration.


A classic introduction to the chronemics subcode from a social and cultural perspective.


A book that sets the cultural paradigm that resides in three time systems: informal time, formal time, and technical time.
Olfaction: The Covert Dimension of Smell

Probably the least understood but one of the most important from a survival perspective is the subcode associated with smell. Olfaction is a process that deals with the perception of odors, their influence and how they become part of our olfactory memory.

This study suggests that odor can influence product evaluations. Discussion can be facilitated around how marketers use subtle scents to manipulate purchasing intents and behaviors.


This study suggests that social preferences, such as attraction of others, are influenced by how we smell and are perceived to smell. Discussion can be facilitated around such things as perfume, pheromones, and body odor.


Classroom Activity. Assign students to wear a cologne or perfume that they personally dislike for a day. In class discuss how they felt during the day, how long the odor stayed with them, and how it affected their behavior. A second day, have them wear the cologne or perfume they like and then compare their feelings with the disliked odor.


A study that tested the notion that odor in advertising (scratch and sniff) impacts on brand attitudes; found no effect on attitude toward the brand.


A study on how odor works as a subtle but significant component of the culturally normative and aesthetic rituals of expressive and impressive everyday life.
Critical Thinking Activities for the Teaching of Psychology

Paul C. Smith

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Over the past four decades teachers of psychology have taken on responsibility for the development of students’ critical thinking skills. In 2007 critical thinking skills were included in the APA Guidelines for the Undergraduate Psychology Major (APA, 2007) among the goals related to “Knowledge, Skills, and Values Consistent With the Science and Application of Psychology”. In this context, critical thinking skills include evaluating information (“including differentiating empirical evidence from speculation”, p. 15), challenging untested claims, using science to resolve disputes about claims, recognizing and avoiding reasoning fallacies, resisting the sway of emotion and appeals to authority in evaluating claims, and demonstrating “persistence, open-mindedness, tolerance for ambiguity, and intellectual engagement” (p. 15).

The set of critical thinking skills identified in the APA Guidelines suggests a working definition of critical thinking that is restricted to the kinds of thinking required to effectively evaluate the truth of claims. Critical thinking is often defined much more broadly, to include general effective thinking, as for example in Halpern (1989): “The term critical thinking is used to describe thinking that is purposeful, reasoned, and goal directed” (p. 5). Under this definition Halpern includes creative thinking and problem solving, which fall outside of the bounds of thinking directed at determining whether or not a claim is true. I prefer to restrict my use of the term “critical thinking” to thinking directed at that determination, but not because I think that other sorts of thinking are unimportant. I believe that the ability to evaluate truth values should not be considered simply one of several ways for a student to demonstrate “critical thinking”. It is an ability that deserves special attention, particularly in psychology programs, where an analysis of the shortcomings of the normal means by which we judge claims is part of the subject matter. In this document, the term “critical thinking” will be used to refer to the kinds of thinking used to evaluate the truth of claims, as in the APA Guidelines.

However defined, it is clear that critical thinking is multi-faceted, with a variety of components ranging from purely cognitive skills such as effective reasoning (Halpern, 1989), to affective skills such as the ability to resist emotional impulses and instead invest cognitive effort (Halpern, 1998), to underlying habits of the mind such as persistence and open-mindedness (Bensley, 2009; West, Toplak & Stanovich, 2008). Critical thinking skills can be difficult to acquire, and because they conflict regularly with our intuitions, our experiences, our emotions, and the assumptions of our cultures, they tend to go unused even after they are learned (Trosset, 1998). Critical thinking can result in emotional discomfort, as it requires us not only to question our beliefs about the world around us, but also our most deeply held beliefs about ourselves. Uncritical thought has proven to be frustratingly resilient, but our colleagues continue to rise to the task with creativity and dedication, identifying roadblocks to students’ critical thinking, and developing activities to help students through those roadblocks. Here are some of the activities designed to give students experience working with some of the difficult aspects of critical thinking. In each case, the goal of the activity is described, followed by the details of the activity and its implementation in the classroom.

Annotated Bibliography

Deep Processing

This activity is designed to show students the importance of deep processing while studying. Students are asked “Which of the following is the MOST important ingredient for successful learning?”, with the options “The intention and desire to learn”, “Paying close attention to the material as you study”, “Learning in a way that matches your personal learning style”, “The time you spend studying”, and “What you think about while studying”. Then they are asked to read a list of words, with one group of students assigned a task that encourages shallow processing (“Does the word
Explaining “Psychic” Phenomena

This activity is designed to give students practice thinking critically about explanations of “psychic” phenomena. Three classroom demonstrations are described, each a magic trick that appears on the surface to demonstrate a “psychic” power. Students are then assigned to develop non-paranormal explanations for the tricks, and to report their explanations to the class.


Four Ways of Determining the Truth of a Claim

The goal of this activity is to introduce students to four ways of determining the truth of a claim: intuition, authority, rationalism, and empiricism. Students are introduced to those terms, and given examples. Then they apply them to the evaluation of ten claims that come from popular “urban legends” (e.g., “Tattoos laced with LSD are used to hook children on drugs”, p. 23). Students are required to apply all four “ways of knowing”, and have a discussion about the relative value of each.


Measurement Error

This activity is designed to give students experience with error in measurement. Students are given answer sheets on which they can mark ten items as “True” or “False”. The instructor then instructs the students to select an answer for “each of 10 questions I will think of”. The students’ responses should be essentially random. An answer key is presented, and the students compute a score equal to the number of correct answers minus the number of incorrect answers, yielding a mean near zero. Discussions and further demonstrations use the experience to illustrate measurement error and regression to the mean.


Parsimonious Explanation

The goal of the three activities described in this article is to introduce the concept of parsimony and to give students practice in applying that concept. For each activity, an explanation is provided, but students
are challenged to come up with more parsimonious explanations. In the first activity the instructor pretends to do a “Clever Hans” demonstration to figure out students’ names, but has actually collected the names beforehand from seating charts (or other simple sources). In the second demonstration the instructor performs a series of simple “mind-reading” tricks. The third demonstration uses a simple stage magic trick with a prepared piece of newspaper column. Follow-up discussion focuses on notions such as “extraordinary evidence for extraordinary claims”, the weakness of anecdote as evidence, and the importance of replication.


Diagnosing Student Thinking

This is not a single classroom activity, but rather an overview of methods of diagnosing students’ preconceptions. The article includes a series of recommended practices for diagnosis, including having students justify their answers, offering questions in two or more formats in order to assess the impact of format on students’ difficulties (Difficulty Factors Assessment), and including either implicit or explicit measures of student confidence in their answers (Two-Dimensional Tests).


The Costs and Benefits of Good Information

The activity’s goal is to make students aware of differences in quality of information, and of effort required to gain information. Students are given the assignment of explaining the behavior of a mass murderer, based on a short case history provided. In small groups, students make mock purchases of additional information for use in their explanations, choosing from three levels of information varying by cost and by how specific the information is to the killings. They are introduced to Bloom’s taxonomy and present explanations using information from across Bloom’s categories. The groups earn points based on the quality of the explanation and on how much of the allotted money they have left over. A follow-up discussion emphasizes the relationship between effort and quality of information.


Hypothesis Generation and Testing

This activity is designed to introduce students to the thinking required for scientific investigation, particularly hypothesis generation and testing. In a group classroom setting, students are presented with a set of four cards arranged in a specific way, and told that the arrangement matches a pattern. They generate several hypotheses about the nature of the general pattern. Then they draw additional cards, and the instructor signals whether or not each card fits with the real pattern. This continues until only one of the hypothesized patterns remains, demonstrating the role of hypothesis generation and observation in the elimination of alternative hypotheses.


Illusory Correlation Effect

The goal of this activity is to demonstrate “illusory correlation”. Students are shown 20 drawings of people, 10 with unusual eyes and ears, and the other 10 with an oversized mouth and a passive posture. Half of the drawings of each type are labeled as having been drawn by a person who is “suspicious of other people” and the other half are labeled as having been drawn by a person who “is concerned with being fed and taken care of”. Students are shown the 20 drawings and asked to identify the characteristics of drawings done by suspicious people and by people concerned with being taken care of. Despite the fact that there is no correlation between the characteristics of the drawings and the label given to the persons who produced them, students tend to believe they saw a correlation, with the unusual eyes and ears signaling suspicion and the passive posture signaling a concern about being taken care of.

Debunking Astrology

The goal of this activity is to introduce students to empirical testing of claims. Students are given a list of 36 adjectives describing personality. They are instructed to select those that they believe describe their own personality. Students then compare their choices with the personality characteristics typically attributed by astrologers to persons of their own astrological sign, demonstrating the lack of relationship between sign and personality.


Proving the Obvious

The purpose of this activity is to refute the notion that psychological research simply confirms what we already know. Students are given one of two forms of a handout containing three statements about human psychology. Each form of the handout contains statements contradicting the corresponding statement on the other form. For example, one of the handouts has as its second statement, “Research on interpersonal attraction finds that people generally are happiest when they date someone similar to themselves”, while the second statement on the other version reads “Research on interpersonal attraction finds that people generally are happiest when they date someone different from themselves.” Students are asked to put checkmarks next to each of the statements they find surprising. They are then asked to raise their hands if they found the first, second, and then third statements surprising.


Intuition Versus Empiricism

This activity is designed to help students understand the importance of empirical data. An activity elicits students’ intuitions about the counterintuitive outcome of a simple choice activity. Then a follow-up activity has students collect data about the value of each possible choice. Students compare empirically-obtained results with their prior intuitions.


Ambiguous Stimuli

This activity demonstrates the role of expectancies and top-down processing in perception. Students are given one of two forms of written instructions for an activity, differing in a single statement that will lead them to perceive an ambiguous figure in one of two ways. Then all students look at the same ambiguous figure, and then are asked yes/no questions about whether or not certain objects appeared in that figure. After the activity, they discuss the role of the instructions in determining how they perceived the figure.


Constructive Memory

This activity uses a “rumor chain” to demonstrate the constructive nature of memory, and more specifically, distortions of memory during retrieval and encoding. Several students are sent out of the classroom, and a story is read aloud to one of the remaining students. Then one by one the students are brought back into the classroom, and the story is repeated to them by the last student to have heard it. Predictable memory distortions are noted: omissions of non-distinctive details, sharpening of distinctive details, addition of extraneous information from the students’ own schemas.

This activity also demonstrates the constructive nature of memory. The activity presents a “personality sketch” about a fictional person. The sketch includes information that leads students to make certain assumptions about the person’s occupation. It is read aloud to the students, who are told to listen carefully, but not to take any notes. A half-hour later they are asked a series of questions about the person described in the sketch. A classroom discussion of the information incorrectly attributed to the story illustrates the students’ use of the representativeness heuristic and schemas.


Social Cognition: First Impressions

This activity illustrates the way that first impressions generate expectancies that then influence interpretation of subsequent information. Half of the students read a statement that “Jim is rumored to be stubborn” while the other half read that “Jim is
rumored to be persistent”. Then all students are provided with a paragraph of other information about “Jim”, and then asked to make judgments about whether Jim is likable, is likely to be argumentative, and whether they would like him as a roommate.


Everything Makes Sense: The Roles of Rationalism and Empiricism in Critical Thinking

As you can see, published critical thinking activities address a number of very different challenges to students’ ability and proclivity to think critically. Here I will describe an activity I have developed to address another of these challenges: our natural tendency to favor reason over evidence.

In my introductory research methods course I have noticed over the years that it can be very difficult to focus students on discussions about research methods. They tend to be easily distracted by the psychological or social content of the examples. For example, if I describe a study of public schools versus “Choice” schools to illustrate the importance of random assignment to groups, students become eager to express their beliefs about public schools and “Choice” schools, and quickly forget that the topic is random assignment to groups. Focusing students’ attention on observational methods is a constant challenge in my introductory methods course.

Much of the history of philosophy can be summarized as a struggle between the rationalists, who believed that reason alone could provide sufficient justification for claims about the nature of the world and the empiricists, who believed that claims are only properly justified when reason is followed up by systematic observation. The empiricists eventually won out, and methodical observation – science – has clearly shown itself to be spectacularly successful at winnowing the true claims about the world from the false ones, where pure reason has demonstrated itself to be ineffective.

Many efforts to improve students’ critical thinking skills seem to assume that the students already recognize the value of empirical observation. But people are not by nature empiricists: Human beings are meaning makers. It is in our nature to theorize about events. Then, seduced by the sensation of certainty produced by having made logical sense of a claim, we filter our subsequent observations through our theories, believing that we have already justified our claims about the world by having made sense of them. In the public discourse, one would never guess that empiricism won the struggle against rationalism, as both the opinion makers and the lay public routinely hold up “it makes sense” as though making sense were evidence in support of claims about how the world is.

The “Everything Makes Sense” activity is designed to demonstrate to students that we can and do make sense of claims regardless of whether or not those claims are true, and therefore that “making sense” is not a very helpful criterion for determining whether or not a claim is true. This activity is based on a discussion of parenting presented in Freakonomics, by Steven D. Levitt and Stephen J. Dubner (2005). Shortly after the book was published, Beth Benoit of Granite State College posted to the TIPS mail list a suggestion about using the chapter on parenting as a catalyst for discussion in a developmental psychology course. I realized that it could also be the basis of a demonstration of the shortcomings of rationalism as a method of evaluating empirical claims.

Levitt and Dubner present a list of 16 factors about a child’s early life, 8 of which are correlated (either positivity or negatively) with a child’s later test scores in school, and 8 of which have no correlation with those test scores (according to the Department of Education’s Early Childhood Longitudinal Study). The 16 factors are:

1. The child has highly educated parents.
2. The child’s family is intact.
3. The child’s parents have high socioeconomic status.
4. The child’s parents recently moved into a better neighborhood.
5. The child’s mother was thirty or older at the time of her first child’s birth.
6. The child’s mother didn’t work between birth and kindergarten.
7. The child had low birthweight.
8. The child attended Head Start.
9. The child’s parents speak English in the home.
10. The child’s parents regularly take him to museums.
11. The child is adopted.
12. The child is regularly spanked.
13. The child’s parents are involved in the PTA.
14. The child frequently watches television.
15. The child has many books in his home.
16. The child’s parents read to him nearly every day

(Levitt & Dubner, 2005, pp. 168-169)
All of the factors are ones that a reasonable person might expect would be related to a child’s test performance later in school.

In my classroom activity, students are given Levitt and Dubner’s list of 16 factors, and are told that eight of the factors are correlated with test scores and eight are not. They are then asked to individually decide which of the factors are related to test scores, and which are not, and also to prepare to explain why they chose the factors they chose. After they have had a reasonable amount of time write down their choices, we go together through the items, one at a time, first asking for a show of hands of students who chose that item as one correlated to later school performance, and then asking if any of those who chose that item would like to explain their choice. Finally I reveal whether or not the factor really was related to later test performance, and read the brief explanation that Levitt and Dubner provide.

Because the students commit both in writing and by raising their hands to acknowledge in public that they have chosen a particular factor, they feel that they have some stake in their answers. But because there are 16 factors and all of them appear to be the kinds of things that would relate to later school test performance, all of the students get some right and some wrong. In other words, all of the students have the experience of having made sense of a claim that then turns out to be false, and they also all have the experience of listening to other students make sense of a claim that then turns out to be false.

The purpose of the activity is to demonstrate to students that the fact that someone can make sense of a claim is not evidence that the claim is true. No matter how reasonable a claim seems, the test of the claim comes only when you make the kinds of systematic observations that distinguish between “sensible, and true” on the one hand and “sensible, but false” on the other hand.

References


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Robin Anderson is a Professor of Psychology at St. Ambrose University in Davenport, Iowa. She received her MA in Psychology from Indiana University, and her BA and Ph.D. in the areas of Social Psychology and Health & Behavioral Science.

In her 21st year at St. Ambrose, Dr. Anderson teaches a range of courses, including Introductory Psychology, Social Psychology, and Writing Intensive Advanced Experimental Design & Analysis. In 1993, she developed the course Health Psychology, which she teaches regularly. Dr. Anderson works extensively with undergraduates to help them develop original empirical research. She has sponsored dozens of student research projects presented at regional and national conferences. She is a regular reviewer for the undergraduate research journals Journal of Psychological Inquiry, and Psi Chi, and is active in the ILLOWA Undergraduate Psychology Conference (one of the oldest undergraduate psychology research conferences). Her research interests include stereotyping and prejudice, and the cognitive effects of stress.

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Sharon K. Anderson received her Ph.D. in Counseling Psychology from University of Denver. She is an associate professor at Colorado State University and her research and writing interests include professional ethics in psychology, counseling, teaching and educational leadership, and diversity related to issues of privilege. She is the co-author of two ethics books: Ethics for Psychotherapists and Counselors: A Proactive Approach and Foundations of Ethical Practice, Research, and Teaching in Psychology and Counseling, 2nd She writes a blog, titled “The Ethical Therapist,” for Psychology Today: http://www.psychologytoday.com/blog/the-ethical-therapist.

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Stephanie Anderson completed her B.A. in psychology and sociology at the University of Nebraska at Kearney. She earned her M.A. degree in social psychology from the University of Kansas, where she is currently pursuing a Ph.D. She is a psychology instructor at Central Community College in Hastings, Nebraska. She teaches Introduction to Psychology, Developmental Psychology, Psychology of Adjustment, and Human Relations. She is also a faculty sponsor of the Multicultural Student Association on her campus. Stephanie's research focuses on the importance of physical attractiveness in everyday life and how this varies depending upon the cultural context.

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Emily Balcetis is an Assistant Professor of Psychology at New York University. She received her Ph.D. in 2006 from Cornell University in Social and Personality Psychology. She received a BA in psychology and a BFA in music performance from the University of Nebraska at Kearney in 2001. Her research provides a comprehensive examination of the pervasiveness of motivational biases in conscious and unconscious visual perception and decision-making. Her research has been recognized by the Society for Experimental and Social Psychology 2007 dissertation of the year award and the 2010 Sage Young Scholars Award. Her teaching has been recognized by the Cornell Clark Teaching Award in part for her involvement of undergraduate students in research and unique educational techniques. In addition, her research has been appreciated by the popular media including such sources as National Public Radio, Newsweek, Time Magazine, ScienCentral, APS Observer, and Skeptical Inquirer.
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Allison Bashe holds a Ph.D. in Clinical Psychology from Stony Brook University and is a licensed psychologist in Colorado. She is currently Senior Instructor and Director of the Psychological Services Center and the master’s of psychology program in the Department of Psychology at the University of Colorado Denver. She teaches graduate ethics, supervises clinical internship courses, and serves on graduate student thesis and project committees. Dr. Bashe’s most recent publication emphasized an acculturation model for ethics training. Her primary scholarly interests include professional ethics, program evaluation and outcome assessment, and the scholarship of teaching and learning. Prior to her work at UCD, she specialized in residential treatment for adolescents. Dr. Bashe occasionally provides training in Dialectical Behavior Therapy and teaches a course on Functional Assessment of Child Behavior Disorders to local doctoral interns.

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Lisa M. Bauer is an Associate Professor at Pepperdine University. She received her doctoral degree in cognitive psychology from the University at Albany. While at the University at Albany, she became interested in studying cognitive aspects of emotion. Her interest in this area includes examining the influence of emotion on memory, false memory for emotion, and the cross-cultural expression of emotion. She enjoys teaching a variety of classes including death, dying, and bereavement, cognitive processes, human memory, principles of learning, and research methods. She is currently teaching three classes at the University of Missouri at Columbia. Dr. Bauer enjoys spending time with family and friends, traveling, and relaxing at the beach.

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Brittan M. Beard is a psychology major and education minor at Moravian College. She plans to attend graduate school. She worked with Dana S. Dunn in the summer of 2010 as part of Moravian College’s SOAR (Student Opportunities for Academic Research) program. Ms. Beard also serves as a student member of the College’s Board of Trustees.

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Paul A. Bell is Professor of Psychology at Colorado State University, where he has been since 1975. He received his Ph.D. in social psychology from Purdue University in 1975, under the direction of Donn Byrne and Robert A. Baron. His research involves environmental psychology, Alzheimer’s disease, human aggression, and conflict resolution. His work has been funded by the National Park Service, the U.S. Forest Service, the National Institute of Mental Health, and the Alzheimer’s Association. His work in environmental psychology covers such topics as heat and noise effects, personal space invasions, territoriality, commons dilemma, road rage, and valuation of nonmarket natural resources. He has served as President of Division 34 of the American Psychological Association (Population and Environmental Psychology) and the Rocky Mountain Psychological Association. His 27 Ph.D. students, including his co-authors on this chapter, often pursue their own work on environmental psychology, including teaching courses on the topic.

Jacob A. Benfield  
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Jacob A. Benfield is an Assistant Professor of Psychology at The Pennsylvania State University’s Abington College located near Philadelphia, PA. He received his Ph.D. in Applied Social Psychology from Colorado State University in 2008. His research interests include a wide range of environmental psychology topics including noise, privacy, territoriality, museum visitor studies, and resource management/conservation. Within each of those domains he is intrigued by the interpersonal or intergroup conflicts that frequently occur as well as how social psychology and individual differences relate to each of those areas of study. He has taught environmental psychology in various forms over the past 5 years and appreciates the unique
challenges presented by teaching such a broad topic to a range of different majors and backgrounds.

Joe Benz  
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Joe Benz studied biology as an undergraduate and then went on to receive his master’s and doctoral degrees in psychology from the University of Nebraska Lincoln. Since then, he has been teaching courses dealing with the biological basis of behavior at the University of Nebraska at Kearney. He teaches courses in behavioral statistics, research design, animal learning, and advanced statistics. However the course that he enjoys the most is animal behavior. The synergistic interaction of genes and the environment never fail to pique his interest. Dr. Benz is also interested in the application of technology to teaching. Thus, his chapter on teaching resources in animal behavior is relatively heavy on the use of computing resources.

Charles L. Brewer  
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Charles L. Brewer received his BA degree in psychology from Hendrix College and his MA and Ph.D. degrees in General Experimental Psychology from the University of Arkansas. He also did graduate work at Indiana University and postdoctoral work at Harvard and the University of Michigan. After teaching at The College of Wooster in Ohio and Elmira College in upstate New York, he joined the faculty at Furman University in 1967, was promoted to the rank of Professor in 1970, and was named the William R. Kenan, Jr., Professor of Psychology in 1998. He teaches General Psychology, Experimental and Statistical Methods, Learning, and History and Systems. After editing the journal titled *Teaching of Psychology* for 12 years, he was named Editor Emeritus in 1996. He has co-edited several handbooks for teachers of introductory psychology, statistics, and research methods. His numerous articles and book chapters cover a wide range of topics, including undergraduate education in psychology and the life and work of John B. Watson, the founder of behaviorism who graduated from Furman in 1899. Charles has received numerous accolades, including the American Psychological Foundation’s Distinguished Teaching Award in 1989. This prestigious award now bears his name.

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K. Robert Bridges is an Associate Professor of Psychology at the Pennsylvania State University at New Kensington. He earned his M.A. in Experimental Psychology from Temple University, and his Ph.D. in Child Development from the University of Pittsburgh. He has been the recipient of the Penn State New Kensington Excellence in Teaching Award, and was the 2005 recipient of the Penn State Milton S. Eisenhower Award for Distinguished Teaching. In addition to his cross-cultural research, and his work on irrational beliefs, his current pedagogical research interests include creating new student-led seminar techniques, and the use of web 2.0 technology in the classroom.

Lynn A. Bruner  
*Lock Haven University*  
Lynn A. Bruner is a licensed psychologist with a Ph.D. in Counseling Psychology from the University of Pittsburgh. She has been teaching in the psychology department at Lock Haven University since 2003, and also has a small private practice serving adolescents, adults, and elders in individual psychotherapy. Clinically, she specializes in creative approaches to stress management, dealing with grief and loss, and understanding the interaction of mental and physical health, especially in women’s health. In the academic arena, she specializes in writing and teaching APA style, plus clinical/counseling courses, health psychology, and developmental psychology; she also mentors many students interested in becoming therapists.

Susan R. Burns  
*Morningside College*  
Dr. Susan R. Burns is the Associate Dean for Academic Affairs at Morningside College (Sioux City, IA). Although her responsibilities are primarily administrative in nature, she continues to teach Psychology of Gender and Theories of Personality. Outside of the classroom, she actively encourages students to become engaged in the research process. Dr. Burns is the Managing Editor for the *Journal of Psychological Inquiry* and was selected
as a recipient of the 2004 and 2008 Sharon Walker Faculty Excellence Award, the 2006 state of Iowa, American Association of University Women Distinguished Faculty Award recipient, and the Omicron Delta Kappa Honor Society 2006 Faculty Person of the Year. Dr. Burns received her B.S. and M.S. in Experimental Psychology from Emporia State University (Emporia, KS) and her Ph.D. in Personality/Social Psychology with an emphasis in Child Development from Kansas State University (Manhattan, KS).

**David W. Carroll**  
*University of Wisconsin-Superior*

David W. Carroll is professor of psychology at the University of Wisconsin-Superior. He received a BA in psychology and philosophy from the University of California at Davis (1972) and an MA (1973) and Ph.D. (1976) in experimental and developmental psychology from Michigan State University. Dr. Carroll teaches courses in introductory psychology, cognitive psychology, history of psychology, and child development. He is the author of *Psychology of Language* (5th edition) and is a member of the Association for Psychological Science, the Society for the Teaching of Psychology and the Society for the History of Psychology.

**Christie Cathey**  
*Missouri Southern State University*

Christie Cathey is an Associate Professor of Psychology at Missouri Southern State University. Dr. Cathey began teaching at Missouri Southern after completing her Ph.D. in Social Psychology at the University of Connecticut in 2002. She was a visiting professor at Tsinghua University in China in 2009, and is very involved in Missouri Southern’s international mission. Dr. Cathey has taken groups of psychology students to France and China to conduct cross-cultural research and has taught several senior-level courses that focus on the intersection of culture and psychology. Dr. Cathey is a strong supporter of undergraduate research and serves as an associate editor for the Journal of Psychological Inquiry. In addition to her pedagogical research, which focuses on the use of online message boards to enhance seated courses, Dr. Cathey is working on research that focuses on the Confucian ethical ideal, *ren*.

**Isabelle D. Cherney**  
*Creighton University*

Isabelle D. Cherney is a professor of psychology at Creighton University in Omaha, Nebraska (USA). She holds a Ph.D. in educational psychology and cultural studies from the University of Nebraska at Lincoln. She has published numerous journal articles on the Scholarship of Teaching and Learning and has earned many teaching awards, notably the 2007 Nebraska Professor of the Year award from the Carnegie Foundation. She has taught 13 different undergraduate courses. Her research examines many aspects of cognitive sex differences and children’s rights. Cherney is the Michael W. Barry Professor and director of the Creighton University Honors Program. She has recently been appointed Associate Dean of the Graduate School and University College and Director of the Interdisciplinary Ed.D. Program in Leadership.

**David B. Daniel**  
*James Madison University*

David B. Daniel (James Madison University) is involved with forging reciprocal links between cognitive-developmental psychology and teaching practices/pedagogy. He is presently the Managing editor of the journal *Mind, Brain, and Education* in addition to serving as Executive Director for the International Mind, Brain and Education Society (IMBES). David is chair of the Society for Research in Child Development’s (SRCD) Teaching Committee, coordinator of the SRCD Teaching of Developmental Science Institute, and past chair of the Society for the Teaching of Psychology’s pedagogical innovations task force. He has published in a diverse range of journals, including JAMA, Child Development, and Teaching of Psychology and also consults on the delivery and development of effective, evidence-based, classroom, print, and electronic pedagogy. David has been the recipient of several teaching awards and his interest in the development of effective teaching has informed his current efforts to develop effective pedagogical techniques that positively impact both student learning and teacher performance.
Alecia V. Denillo
*Pennsylvania State at New Kensington*

Alecia V. Denillo is a senior at the Pennsylvania State University at New Kensington majoring in applied psychology. She is currently completing her internship at a social service agency. Her interests include clinical, counseling and forensic psychology.

Jessica Deyo
*University of Alabama at Birmingham*

Jessica Deyo (MA, University of Alabama at Birmingham, 2010) has held the position as Graduate Teaching Assistant, Adjunct Instructor of Public Speaking, and assistant in a Communication Management course at the University of Alabama at Birmingham. Jessica's research and teaching interests include communication in the work place, intercultural communication, as well as nonverbal communication in dating and marriage. Ms. Deyo was also responsible for the creation of a public speaking competition for undergraduate students to compete for scholarships at a local university. In the future, Jessica will be applying for doctoral programs related to her field of interest.

Dana S. Dunn
*Moravian College*

Dana S. Dunn earned his B.A. in psychology from Carnegie Mellon University and received his Ph.D. in social psychology from the University of Virginia. Former chair of the Psychology Department and Philosophy Department at Moravian, he is currently Professor of Psychology and Director of the Learning in Common (LinC) Curriculum. A Fellow of the American Psychological Association (APA) and the Association for Psychological Science (APS), Dunn served as President of the Society for the Teaching of Psychology in 2010. He is a frequent speaker at national and regional disciplinary conferences. Dunn has written over 100 articles, chapters, and book reviews concerning his areas of interest: the teaching of psychology, social psychology, and rehabilitation psychology. He is the author or editor of 13 books, including *Research Methods for Social Psychology, The Practical Researcher, A Short Guide to Writing about Psychology, and Psychology Applied to Modern Life: Adjustment in the 21st Century.*

Amber Esping
*Texas Christian University*

Amber Esping is an assistant professor of Educational Psychology at Texas Christian University. Her research agenda has two strands: (1) The history of the construct of human intelligence and (2) the application of existential psychology to academic contexts and qualitative inquiry. She is co-author (with Jonathan Plucker) of *Intelligence 101*, a book in the *Psychology 101* series published by Springer.

Frank Ferraro III
*Nebraska Wesleyan University*

Frank Ferraro III received a Bachelor of Science degree in psychology from University of Nebraska-Omaha. He completed his doctoral work at Kansas State University. His dissertation focused on the effects of endogenous opioid peptides on male rat sexual behavior. Following the Ph.D., he was a postdoctoral fellow at the University of North Carolina-Chapel Hill working on the neurobiological effects of alcohol in genetic knockout mice. His life-long passion has always been teaching and he is currently an assistant professor of psychology at Nebraska Wesleyan University.

David Fisher
*Lehigh University*

David Fisher is currently a graduate student studying Sociology at Lehigh University. He earned his Bachelor of Arts degree at Moravian College and is interested in relational communication, attraction, and personal relationships.
Michelle L. Flaherty  
*Pennsylvania State at New Kensington*

Michelle L. Flaherty is a senior undergraduate student at the Pennsylvania State University at New Kensington. She is majoring in applied psychology and is currently conducting her internship at a skilled nursing facility. Her interests are social work and clinical psychology.

Donelson R. Forsyth  
*University of Richmond*

Donelson R. Forsyth received his Ph.D. in social psychology from the University of Florida. He teaches and studies leadership, group processes, the social psychology of morality, environmentalism, and social cognition. He was the founding editor of the journal *Group Dynamics: Theory, Research, and Practice* and he received, in 2002, the Virginia Council of Higher Education’s Outstanding Faculty Award. He currently holds the Colonel Leo K. and Gaylee Thorsness Endowed Chair in Ethical Leadership in the Jepson School of Leadership Studies at the University of Richmond.

Cindy Gibson  
*Washington College*

Cindy Gibson is an Associate Professor of Psychology at Washington College. She teaches a variety of psychology courses that involve an experiential lab component, such as Sensation and Perception, Biological Psychology, Statistics and Research Design II, and Neuroscience Research Methods. These courses are extraordinarily rewarding since they immerse the students in the subject matter, engaging their critical and creative thinking skills. Dr. Gibson has taught more than 1200 undergraduate students, mentored more than 80 research students, and has supervised more than 20 Senior Capstone thesis projects. Her research interests include the pedagogy of teaching and primary research into rodent models of traumatic brain injury.

Thomas C. Greene  
*St. Lawrence University*

Thomas C. Greene is the Sarah Johnson Redlich Professor of Science and the Chair of the Department of Psychology at St. Lawrence University. There he served as Coordinator of User-Facilities Programming, shepherding the planning of arts performance and concert spaces, and a LEED gold certified (Leadership in Energy and Environmental Design) science laboratory building. He has been teaching environmental psychology for over thirty years, and for the past 15, as a field-based studio course. He received his Ph.D. in Experimental Psychology from Colorado State University in 1983.

Jana Hackathorn  
*Saint Louis University*

Jana Hackathorn is a senior graduate student and adjunct faculty member of Saint Louis University at St. Louis, MO. Her research focuses on increasing students’ engagement in the classroom as a means of increasing application and synthesis skills. In addition, she studies the effectiveness of interactive lecturing and humor as a pedagogical tool. Jana received her B.A. in psychology from Park University, an M.A. in psychology from University of Saint Mary, and will graduate with her Ph.D. in experimental social psychology from Saint Louis University in 2011.

Lisa Kindleberger Hagan  
*Metropolitan State College*

Lisa Kindleberger Hagan is an Associate Professor at Metropolitan State College of Denver. She teaches Cognitive Development and Learning, Infancy, Child Psychology, Life Span Development, and Developmental Research Methods. Her primary research interests lie in active learning in higher education and children’s unintentional risk taking and safety rule knowledge.
Elizabeth Yost Hammer  
*Xavier University*  
Elizabeth Yost Hammer is the Director of the Center for the Advancement of Teaching and a Kellogg Professor in Teaching at Xavier University of Louisiana. A Social Psychologist by training, she has contributed chapters to several books intended to enhance teaching preparation including *The Handbook of the Teaching of Psychology*, *The Teaching of Psychology: Essays in Honor of Wilbert J. McKeachie and Charles L. Brewer*, and *Turning Your Psychology Degree into a Career: Life After the Ph.D.* In addition, she has published in *Teaching of Psychology* and a special teaching-related issue of the *Journal of Social and Clinical Psychology*. She co-edited the APS/Prentice-Hall reader, *Current Directions in Social Psychology*, now in its second edition, and is a co-author on the 10th edition of *Psychology Applied to Modern Life*. Dr. Hammer is a past-president of Psi Chi and has served as treasurer for the Society for the Teaching of Psychology.

Mitch Handelsman  
*University of Colorado-Denver*  
Mitch Handelsman earned his Ph.D. in clinical psychology from the University of Kansas and is a professor and CU President’s Teaching Scholar at the University of Colorado Denver. He has won teaching awards from the Council for Advancement and Support of Education and the Society for the Teaching of Psychology, a division of APA, of which he is a Fellow. His major research area is professional ethics; he has published widely in ethics and is the co-author (with Sharon K. Anderson) of a text on ethics in psychotherapy (*Ethics for Psychotherapists and Counselors: A Proactive Approach*) from Wiley-Blackwell. His more than fifty articles—dealing with teaching, ethical issues, and mental health topics—have appeared in outlets ranging from *Psychology Today* to *Professional Psychology: Research and Practice* and the *Canadian Journal of Counseling*. He blogs for *PsychologyToday.com* and writes an ethics column for *Eye on Psi Chi*.

Richard J. Harnish  
*Pennsylvania State at New Kensington*  
Richard J. Harnish is an Associate Professor of Psychology at The Pennsylvania State University at New Kensington. He earned his Ph.D. and M.A. in Social Psychology from Michigan State University, and holds a B.A. in Psychology from The Pennsylvania State University. His research interest focuses on the intersection between attitudes, the self and affect, as well as pedagogical issues such as what information makes for an effective syllabus and how the information should be presented (i.e., syllabus tone). Smart Growth Partnership of Westmoreland County and Westmoreland Economic Development and Initiative for Growth have honored his applied social psychology classes with awards for their community engagement activities.

Kathryn Hendricks  
*Creighton University*  
Kathryn Hendricks graduated from Creighton University in Omaha, Nebraska in 2011 with a B.A. in Psychology. She has been involved in forensic psychology research at Creighton University since January of 2010 and has plans to attend graduate school in psychology in the next couple of years. Her research interests include domestic violence, sexual offenses, and psychopathology.

Mark Hickson, III  
*University of Alabama at Birmingham*  
Mark Hickson, III (Ph. D., Southern Illinois University) is Professor of Communication Studies at the University of Alabama at Birmingham. He has taught nonverbal communication for more than 35 years. He has published six textbooks in nonverbal communication, and a seventh will be published in 2011. He is founding editor and publisher of the *Journal of Applied Communication Research*. He has also edited *World Communication* and *Qualitative Research Reports in Communication*.
Alan Hughes  
*Berry College*

Alan Hughes is a native of central Kentucky and did his undergraduate and graduate work in Kentucky. He earned a Bachelor’s degree in psychology from Berea College in 1994 and a Master’s in Applied Experimental Psychology from Western Kentucky University in 1996. He then went on to earn a Ph.D. in experimental psychology, with an emphasis in perception and neural science, from the University of Louisville in 2000. Dr. Hughes is trained in both animal and human visual electrophysiology and in animal and human psychophysics. After earning his doctorate, he accepted a tenure-track position at Nazareth College in 2000. Although successful at Nazareth, being tenured and promoted, he left Nazareth in 2007 to accept a faculty position at Berry College in Rome, Ga. Currently he is an Associate Professor of Psychology. His research interests are in the areas of visual neuroscience and visual perception.

Michael Hulsizer  
*Webster University*

Michael Hulsizer is an Associate Professor of Psychology at Webster University. He is a social psychologist and teaches courses in Social Psychology, Altruism & Aggression, Stereotyping, Prejudice, & Discrimination, Social Influence & Persuasion, Science & Pseudoscience, as well as traditional experimental classes in Statistics and Research Methods. His research interests parallel his teaching and include international human rights, interpersonal and mass violence, hate groups, and peace psychology. Michael has co-authored several chapters and articles with Dr. Linda Woolf examining these areas. He is also a past officer and the current newsletter editor for the Society for the Study of Peace, Conflict, and Violence (Peace Psychology—Division 48 of the APA) and a Fellow with the Institute for Human Rights & Humanitarian Studies. Hulsizer and Woolf have also authored A Guide to Teaching Statistics: Innovations and Best Practices published by Wiley-Blackwell.

Matthew T. Huss  
*Creighton University*

Matthew T. Huss is currently Professor at Creighton University in Omaha, Nebraska. He also is a graduate of the University of Nebraska Law and Psychology and Clinical Psychology training programs. He is the author of over 40 different scholarly publications and a textbook on forensic clinical psychology, *Forensic Psychology: Research, Practice, and Applications*. His primary research interests focus on risk assessment, domestic violence, psychopathy, and sex offenders. In addition, he has significant interests in training and education in law and psychology.

Allen Keniston  
*University of Wisconsin-Eau Claire*

Allen Keniston has taught psychology at the University of Wisconsin – Eau Claire for the past 28 years. His teaching menu includes a variety of courses, but currently consists of cognitive psychology and history and systems of psychology. Keniston’s research interests have included memory development, gender stereotyping, lifestyle influences on health and well-being, and the value of PowerPoint as a lecture aid, but lately focused on topics in the ethics of teaching.

Maya M. Khanna  
*Creighton University*

Maya M. Khanna is an Assistant Professor of Psychology at Creighton University. She examines reading and memory processes in adults and children. One of her research goals is to design research-based reading instruction programs. Maya completed her undergraduate work in psychology and neuroscience at Washington University in St. Louis. After graduating, she served as a high school science teacher with Teach For America in San José, California. Maya’s interactions with high school students lead to her present interest in reading and memory development. Thus, Maya sought graduate training in cognition and development at the University of Michigan. After receiving her Ph.D. in 2006, she joined the faculty of Creighton University.
where she teaches classes in developmental psychology, cognitive psychology, psychological research methods, and statistics. Maya greatly enjoys collaborating with undergraduate students on research projects. Currently, they are conducting studies on reading and memory development with several partner elementary schools.

Kevin L. Ladd  
**Illinois University-South Bend**

Kevin L. Ladd was born and raised in northwestern Ohio, and earned degrees from Heidelberg College (B.A.), Princeton Theological Seminary (M.Div.), and the University of Denver (M.A., Ph.D.). He has taught psychology at IU South Bend since 2001. Dr. Ladd’s involvement in the psychology of religion dates back to his sixth grade science fair when he and two of his fellow students constructed a relaxation booth to teach visitors rudimentary meditative practices. Currently supported by a generous grant from the John Templeton Foundation, he has used labyrinths, digital cameras, and life-sized mannequins to establish theologically sensitive and mathematically stable tools that evaluate mental, emotional, and behavioral aspects of prayer. Off campus, Kevin can frequently be found working with his wife, Meleah, daughters Arryngton and Aurelia, and son, Alasdair at they put finishing touches on the 1890s home that they brought back from the brink of demolition.

Bill Lammers  
**University of Central Arkansas**

Bill Lammers is a professor of psychology at the University of Central Arkansas, where he has been for 21 years. He received his bachelor’s degree in psychology at San Diego State University and his Ph.D. in Experimental Psychology at Bowling Green State University. After beginning a research career in the areas of sleep and psychophysiological research, he now studies the qualities of student-professor rapport and its relation to academic performance. In 2005, he co-authored the textbook entitled *Fundamentals of Behavioral Research* and continues to involve students in the research process, coauthoring publications/presentations with over 170 students to date. He is the recipient of several teaching awards. When not working, Bill enjoys hiking, sailing, kayaking, and other outdoor activities.

Steven A. Lloyd  
**North Georgia College and State University**

Steven A. Lloyd is an associate professor in the Department of Psychology at North Georgia College & State University. He earned an MS in Psychology from the University of Memphis and a Ph.D. in Anatomy and Neurobiology from the University of Tennessee Health Science Center. He has authored or coauthored book chapters and journal articles on such topics as the effective use of technology in the classroom and laboratory and the effects of psychostimulants on the adult and developing brain. His current interests are in the development and assessment of cross-disciplinary undergraduate research experiences and the long-lasting behavioral teratogenic effects of *in utero* exposures to prescription stimulant medications.

Britton L. Mace  
**Southern Utah University**

Britton L. Mace is Professor of Psychology at Southern Utah University, where he teaches Environmental and Social Psychology. He received his Ph.D. in Experimental Psychology from Colorado State University in 1999. Britt maintains an active research program at SUU, working collaboratively with undergraduates and mentoring over 30 conference presentations. Britt has served as a consultant with the National Park Service for over a decade, with his work on soundscapes, receiving several grants. Dr. Mace has published his research in such respected journals as *Environment and Behavior, Society and Natural Resources*, the *Journal of Park and Recreation Administration*, and the *Journal of Applied Social Psychology*.

B. Jean Mandernach  
**Grand Canyon University**

B. Jean Mandernach is Professor of Psychology and Director of the Center for Innovation in Research and Teaching at Grand Canyon University. Her research focuses on enhancing student learning through assessment and innovative online instructional strategies. In addition, she has interests in examining the perception of online degrees, the quality of online course offerings and the development...
of effective faculty evaluation models. Jean received her B.S. in comprehensive psychology from the University of Nebraska at Kearney, an M.S. in experimental psychology from Western Illinois University and Ph.D. in social psychology from the University of Nebraska at Lincoln.

Rick Miller
*University of Nebraska at Kearney*

Rick Miller received his Ph.D. from Northwestern University. He has taught at Georgetown University, the University of Cologne, and was, for 20 years, chair of the Psychology Department at the University of Nebraska at Kearney. He served for many years as the Director of applied behavioral science research projects for the Human Resources Research Organization (HumRRO) in Heidelberg, Germany after which he set up a community college program for English speaking residents of Mallorca, Spain. Under his leadership, the UNK Department of Psychology was recognized as the 1999 Outstanding Teaching Department in the University of Nebraska system. He has published articles and chapters on social influence, research ethics, the teaching of psychology, multicultural identity and environmental psychology. His books examine social comparison processes, undergraduate student research, and student engagement. In 2009 he received the Robert S. Daniel Teaching Excellence Award from the Society for the Teaching of Psychology and was named US Professor of the Year by CASE and the Carnegie Foundation for the Advancement of Teaching.

Marianne Miserandino
*Arcadia University*

Marianne Miserandino is the 2010 winner of the Robert S. Daniel Teaching Excellence Award, Four-Year Colleges and Universities, from the Society for the Teaching of Psychology (Division 2 of the American Psychological Association). She was also the 2009 Arcadia University Professor of the Year and the 2000 recipient of the Lindback Award for teaching excellence. She currently maintains the Personality Pedagogy web site for teachers of personality psychology (http://personalitypedagogy.arcadia.edu) for which she received a grant from the Association for Psychological Science (APS) Fund for Teaching and Public Understanding of Psychological Science. Dr. Miserandino received her B.A. in psychology from the University of Rochester and a Ph.D. in Social-Personality Psychology from Cornell University. Dr. Miserandino came to Arcadia University after a postdoctoral fellowship in Human Motivation at the University of Rochester.

Michael Nielsen
*Georgia Southern University*

Michael Nielsen is Professor and Interim Chair of Psychology at Georgia Southern University, where he has taught Psychology of Religion and other courses since 1993. He is coeditor of *Archive for the Psychology of Religion*, serves on the editorial boards of *Journal for the Scientific Study of Religion* and *Dialogue: A Journal of Mormon Thought*, and the advisory board of *Pakistan Journal of Psychology*. He is author of an award-winning website on the Psychology of Religion, has delivered an invited lecture on that subject in Ukraine, and has received awards for service from the American Psychological Association and Georgia Southern University.

Gretchen A. Nurse
*University of Arizona-Tucson*

Gretchen A. Nurse received her Ph.D. in Applied Social Psychology from Colorado State University in 2009 with an emphasis in social and environmental psychology. Her dissertation looked specifically at consumer motivations to purchase locally grown produce. She earned her B.S. at UC Berkeley in Conservation and Resource studies with an emphasis in land management and policy. She has served as a Postdoctoral Fellow at Colorado State University working in collaboration with the National Park Service. Gretchen has accepted a tenure-track appointment in the John and Doris Norton School of Family and Consumer Sciences, College of Agriculture and Life Sciences, at The University of Arizona in Tucson. She will be part of an interdisciplinary team working on the Consumers, Environment, and Sustainability Initiative. Gretchen’s areas of research in environmental psychology cover such topics as sustainable consumer behavior, decision making, sustainable agriculture, and attitudes and values related to natural resources.
Missi Patterson

Austin Community College

Missi Patterson earned her PhD in Psychology from Texas A&M, where she studied cognitive development. Her research has focused on creativity, language, as well as effective pedagogy. She is currently an Associate Professor at Austin Community College, where she enjoys the rewards and challenges of working with a diverse student population. Her experience in sexuality education has afforded her the opportunity to serve as the first Human Sexuality Area Coordinator at Austin Community College, and in this position she provides support for the Sexuality Education faculty. In addition to her work with both college students and faculty, Dr. Patterson works with parents of elementary school children to facilitate their ability to communicate about sexuality with their children.

Karen Rayne

Austin Community College

Karen Rayne completed her degree in Educational Psychology with a focus on adolescent sexual development. Her research covered a broad base of topics, focusing on cognitive and sexual development and the essential elements of effective teaching methods. These topics have since come together to form the basis of Dr. Rayne’s career in providing best practices sexuality education to students ranging in age from middle and high school students to college students and adults. In addition to her direct teaching, Dr. Rayne also writes curriculum, speaks to national audiences, and provides support to schools and non-profits in the areas of adolescent sexual development and sexuality education.

Eleni Pinnow

University of Wisconsin – Superior

Eleni Pinnow received a BA in Psychology from St. Olaf College and her MA and Ph.D. from Binghamton University in Cognitive Psychology (specializing in spoken word recognition). She is currently an Assistant Professor at University of Wisconsin-Superior where she teaches classes about Cognitive and Biological Psychology.

Aaron S. Richmond

Metropolitan State College

Aaron S. Richmond is an Assistant Professor of Human Development and Educational Psychology at Metropolitan State College of Denver. He teaches courses in both developmental and educational psychology. His primary research interest resides in the general area of Scholarship of Teaching and Learning. Additionally, he conducts research on the effects of using memory and learning strategies in elementary, secondary, and post-secondary classrooms.

Jonathan Plucker

Indiana University

Jonathan Plucker is a professor of educational psychology at Indiana University, where he also directs the Center for Evaluation and Education Policy and Consortium for Education and Social Science Research. His most recent books are Essentials of Creativity Assessment (Wiley) and Critical Issues and Practices in Gifted Education: What the Research Says (Prufrock).

Chuck L. Robertson

North Georgia College and State University

Chuck L. Robertson is an associate professor and chair of the North Georgia psychology department. He earned a Ph.D. from Georgia Tech in Experimental Psychology. While there he specialized in Cognitive Aging (specifically memory in adults) and minored in Statistics. He has authored several papers in the areas of episodic memory and using technology as an educational tool. His current interests are in the science of teaching and learning and involving undergraduates in research.
Patricia Romano  
*Colorado State University*

Patricia Romano received a Ph.D. in sociology from Colorado State University in 1997 and another Ph.D. from CSU in Applied Social Psychology in 2008 in which she was also trained in environmental psychology. Her primary research area is chronic pain management. She is the creator of the Six-Segment Health Model, which includes assessment of how physical and natural environmental factors impact chronic pain conditions. Dr. Romano has taught and developed environmental psychology undergraduate courses. Her perspective is that knowledge of how built and natural settings influence mental processes and behavior is essential for understanding the “whole” person.

Alexandra Ross  
*Missouri Southern State University*

Alexandra Ross graduated from Missouri Southern State University in 2010 with a Bachelor's Degree in Psychology. Her senior thesis, Mortality Salience and Self-Construal, was presented at the 30th Annual Great Plains Psychology Convention and has been accepted for publication in the *Journal of Psychological Inquiry*. Her research interests include multiculturalism, terror management theory, sexual prejudice, positive psychology, and personal growth. She plans to pursue a career in counseling psychology.

Bryan K. Saville  
*James Madison University*

Bryan K. Saville is an associate professor in the Department of Psychology at James Madison University. He earned his Ph.D. in experimental psychology from Auburn University, where he had the good fortune of working with Bill Buskist. It was also during his time at Auburn that Bryan became interested in the teaching of psychology. In the last few years, he has focused his research efforts on studying interteaching, a new teaching method that has its roots in behavior analysis. In addition, Bryan has been heavily involved in the Society for the Teaching of Psychology (Division 2 of APA), serving at various times as vice president for awards and recognitions and as chair of the teaching awards committee. Bryan is an associate editor for the journal *Teaching of Psychology* and the author of *A Guide to Teaching Research Methods in Psychology*, published in 2008 by Wiley-Blackwell.

Ryan A. Shanks  
*North Georgia College and State University*

Ryan A. Shanks is an assistant professor in the Department of Biology at North Georgia College and State University. He earned a Ph.D. in Molecular Medicine and Genetics from the Medical College of Georgia. He has authored several papers in the field of cell biology and immunology. His current interests are in the development of research opportunities for undergraduates in the field of neuroimmunology and incorporation of cross-disciplinary research experiences into psychology and biology curriculums.

Jeanne M. Slattery  
*Clarion University*

Jeanne M. Slattery is Professor of Psychology at Clarion University of Pennsylvania. She is a clinical psychologist with a small, private practice working with people with histories of depression, anxiety and trauma. She has published two books with Brooks/Cole—*Counseling diverse clients: Bringing context into therapy* (2004) and *Empathic counseling: Meaning, context, ethics, and skill* (with Crystal Park, 2011)—and has published on spirituality and psychotherapy in chapters for edited books and journals such as *Psychotherapy: Theory, Research, Practice, Training, and Professional Psychology: Research and Practice*. She has been very active in leading the teaching and learning cooperative at her university.

Whitney F. Smiley  
*James Madison University*

Whitney F. Smiley is currently completing a master’s degree in the Psychological Sciences program at James Madison University and will be working towards a Ph.D. in educational research at the University of South Carolina. She currently conducts research on teaching and training practices at the university as well as on educational assessment and measurement.
Paul C. Smith  
*Alverno College*

Paul C. Smith is a Professor of Psychology and Chair of the Institutional Review Board at Alverno College in Milwaukee, WI. He teaches courses in cognitive psychology, psychological research methods, and physiological psychology. In addition, he is interested in second language learning, and regularly participates in language immersion programs in French- and Spanish-speaking countries. In June of 2011 he will complete a term as the President of the Alliance Française de Milwaukee. Finally, he has applied his interest in measurement to NASA-supported educational projects involving remote sensing and the development of inexpensive telemetry devices for high power rocketry.

Don W. Stacks  
*University of Miami*

Don W. Stacks, (Ph.D., University of Florida) is a Professor of Public Relations in the School of Communication and Associate Dean for Research at the University of Miami, Coral Gables, FL. Stacks has written more than 150 scholarly articles and papers. Stacks has authored eight books on communication topics, to include the award winning *Primer of Public Relations Research*, the National Communication Association’s PRIDE award which was named the Measurement Standard’s “measurement tool” for 2003. He has co-authored *Nonverbal Communication: Studies and Applications* with Mark Hickson and Nina-Jo More through five editions.

Anton Tolman  
*Utah Valley University*

Anton Tolman earned his Ph.D. in Clinical Psychology from the University of Oregon and completed his internship at Connecticut Valley Hospital. Before joining the ranks of academia, he worked as a unit psychologist and then Chief Psychologist at the Wyoming State Hospital for a number of years. He also has many years of experience in outpatient treatment with a variety of populations. He is currently Associate Professor of Behavioral Science at Utah Valley University where his scholarly interests focus on forensic psychology, particularly the application of psychological findings to evaluation of dangerous offenders, and student and faculty metacognition. He also directs the Faculty Center for Teaching Excellence which is charged with promoting engaged teaching strategies across campus to improve student learning.

Price Walt  
*University of Alabama at Birmingham*

Price Walt (M.A., University of Alabama at Birmingham) is on the Adjunct Faculty at the University of Alabama at Birmingham. She has future plans of obtaining a Ph.D. and is currently searching for the program that best fits her research interests. This Psychology E-book has pioneered her prospective career in Communication research. In March of 2010 she traveled to Thailand as a Graduate Teacher’s Assistant at Ramkhamheang University in Bangkok. She serves as Editorial Assistant for *Qualitative Research Reports in Communication*.

Wayne Weiten  
*University of Nevada-Las Vegas*

Wayne Weiten is a graduate of Bradley University and received his Ph.D. from the University of Illinois, Chicago in 1981. He currently teaches at the University of Nevada, Las Vegas. He has received distinguished teaching awards from Division Two of APA and from the College of DuPage, where he taught until 1991. He is a Fellow of Divisions 1 and 2 of the American Psychological Association. In 1991, he helped chair the APA National Conference on Enhancing the Quality of Undergraduate Education in Psychology and in 1996-1997 he served as President of the Society for the Teaching of Psychology. Weiten has conducted research on a wide range of topics, including educational measurement, jury decision-making, attribution theory, stress, and cerebral specialization. He is the author of *Psychology: Themes & Variations*, *Psychology Applied to Modern Life: Adjustment at the Turn of the Century*, and *PsykTrek: A Multimedia Introduction to Psychology*.
William Douglas Woody
University of Northern Colorado

William Douglas Woody is Professor of Psychological Sciences at the University of Northern Colorado. He earned his Ph.D. at Colorado State University in 1999 and taught at the University of Wisconsin – Eau Claire for two and a half years before coming to the University of Northern Colorado. Dr. Woody conducts research in teaching of psychology, history of psychology, and psychology and the law, and he teaches a variety of courses including history and systems of psychology, psychology of prejudice, psychology and the law, psychology of religion, and a graduate seminar on college teaching. Dr. Woody has been recognized with Early Career awards from The Society for the History of Psychology and the Rocky Mountain Psychological Association. He is the recipient of national and university-wide teaching awards, and students at two of the three universities where he has taught have named him Best Professor.

Linda M. Woolf
Webster University

Linda M. Woolf is a Professor of Psychology and International Human Rights at Webster University. Recent articles, book chapters, and presentations, many co-authored with Michael R. Hulsizer, focus on hate groups, torture, women’s rights, the psychosocial roots of genocide and terrorism, and diversity issues. Dr. Woolf is Past-President of the Society for the Study of Peace, Conflict, and Violence (Peace Psychology—Division 48 of the APA), an Institute for the Study of Genocide Board Member, Editorial Board Member for H-Genocide, Editorial Board member for Peace & Conflict: Journal of Peace Psychology, and Fellow with the Institute for Human Rights & Humanitarian Studies. Dr. Woolf is an APA Fellow with fellow status within the Society for the Study of Peace, Conflict, and Violence; International Psychology; and The Society for the Teaching of Psychology. Hulsizer and Woolf have also authored A Guide to Teaching Statistics: Innovations and Best Practices published by Wiley-Blackwell.

Tracy E. Zinn
James Madison University

Tracy E. Zinn is currently an associate professor in the Department of Psychology at James Madison University. She earned her Ph.D. in Industrial/Organizational Psychology with a minor in experimental psychology from Auburn University in 2002. In 2007, she received the Early Career Award from the Society for the Teaching of Psychology (STP; Division 2 of the American Psychological Association) and the Junior Faculty Award for the College of Integrated Science and Technology at JMU. At JMU, Dr. Zinn teaches courses in statistics and research methods, performance management, and industrial/organizational psychology. In addition, she conducts research on effective teaching practices and faculty and student perceptions of students as customers in higher education.