Multiculturalizing the Introductory Psychology Course: A Framework

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Introduction

Given our increasingly diverse society, it is important that we as educators prepare students to live and work with diverse populations. Students need to be able to interact effectively with those who are different, and to ultimately act as agents for social change. Recent growth of scholarship in the areas of gender, race, ethnicity, sexual orientation (and other areas of difference) makes it easier and more relevant to incorporate diversity issues into psychology courses. It can be particularly challenging, however, to do this effectively within the Introductory or General Psychology course given the sheer amount of material that needs to be covered in such a course. It is all too convenient for the instructor to view diversity as a topic to be “added on” after the “more important” content has been addressed.

We will provide a framework for taking a different approach, for culturally transforming the Introductory Psychology course. A culturally transformed course differs from a traditional course in content, methods, assessment, and dynamics (NEPDEC, 2002). Attention to diversity is not merely seen as an “add on” component, but instead is integrated into the fabric of the course.

Multicultural Course Transformation (NEPDEC, 2002)

Multicultural course transformation should involve attention to 4 areas (course content, instructional methods, assessment, and teaching/learning dynamics) and should be viewed as a process, with movement from the traditional course to the culturally enhanced course, to eventually the culturally transformed course (see below).

Type I: Traditional course

- Course content is almost exclusively centered on traditional mainstream experiences and perspectives on the discipline.
- Information is conveyed by lectures, with limited opportunities for discussion.
- Student performance is assessed with multiple choice and/or essay examinations.
- The classroom is dominated by the instructor, without significant attempts to elicit or support participation by all students.

Type II: Culturally Enhanced Course

- Traditional views and content are presented, with some additional content and perspectives.
- In addition to lectures, teaching methods are used which involve students in a variety of activities such as discussion, collaborative group work, and independent learning.
- Evaluation of student performance occurs through a variety of means such as objective testing, writing of papers, or class presentations. Class time is organized in a way that encourages and supports active participation by all students.
Type III: Culturally Transformed Course

- Students are encouraged to look at course content in new and original ways. Traditional questions, content, and assumptions are examined and challenged.
- Course delivery recognizes diverse learning styles.
- While exams may be given, more weight is given to student-generated ways of applying newly gained knowledge (i.e., papers, journals, presentations). The classroom becomes a place where power, ideas, and participation are freely shared between students and instructor (in the context of appropriate roles & responsibilities).

Types of Diversity and Areas of Diversity Understanding

There are various types of diversity that should receive attention in a multicultural course, and 4 areas of diversity understanding that can be addressed.

Types of Diversity
- Race
- Ethnicity
- Gender
- Disability
- Sexuality/sexual orientation
- Religion
- Social class
- Non-western cultures

Four Areas of Diversity Understanding

1. Self-identification: Students recognize how diverse and unique cultural lenses contribute to individual identity and behavior.
2. Diversity appreciation and value: Students discover how an understanding of diversity can lead to appreciation and respect for others.
3. Diversity consciousness of community and society: Students demonstrate an understanding of similarities and differences among diverse people in the United States, and how privilege individually and collectively impacts opportunity.
4. Diversity in a democratic society: Students delineate the role of diversity in a democratic society, and consider their responsibility to challenge social injustices based on prejudice and discrimination.

Suggestions for Inclusion of Diversity in Introductory Psychology: A Chapter by Chapter Guide

Ideas for discussion topics, class activities, and assignments for each chapter/sub-field covered in a traditional introductory course are presented below and linked to the areas of diversity understanding. Discussion topics and class activities could be turned into writing assignments if desired.

Introduction to Psychology (history, perspectives, and methods)

Discuss with students why you believe diversity is important and why it is an integral part of the class. Discuss ground rules for respectful and inclusive discussions in class.

(Area addressed: Diversity appreciation and value)

Include contributions of women and minorities to the history of psychology (a good source is Guthrie’s 1998 book Even the rat was white: A historical view of psychology). Ask students to write a brief response before coming to class to the question “Why do you think there is so little diversity (lack of women and minorities) in the timeline presented in the textbook?” Have students share their responses in class and discuss. Or ask students to research contributions of women and minorities to the field of psychology and share them with the class.

(Area addressed: Diversity appreciation and value)

Ask students “Is science objective and value free?” Discuss how psychology can be seen by some as ethnocentric and androcentric.

(Area addressed: Diversity consciousness of community and society)

Discuss the bias against publishing non-significant findings. Ask students how this bias could lead us to focus more on differences than similarities.

(Area addressed: Diversity consciousness of community and society)

Neuroscience

Ask students to discuss their understanding of the concept of “race” (have them first write down their own definitions). Discuss race as a social as opposed to biological construct. Ask “How could the mistaken assumption that race is biologically based contribute to stereotypes and prejudice?”

(Area addressed: Diversity consciousness of community and society)

Nature & Nurture

Ask students to discuss in groups how biological and environmental factors might contribute to gender differences. You might assign each group a different trait, behavior, or ability (i.e., aggression, spatial ability, high level mathematical reasoning) and then have them “report out” to the class.

(Area addressed: Diversity consciousness of community and society)

Do a classroom exercise on gender socialization where students are divided into male and female groups. Ask your students to think about what they learned about being girls/women or being boys/men from parents, peers, teachers, and the media.

(Area addressed: Self identification)
Ask the class to list stereotypes associated with each gender. Discuss why stereotypes can be damaging and emphasize the differences between stereotypes and group tendencies (illustrated by overlapping bell curves).

(Area addressed: Diversity consciousness of community and society)

Discuss research on genetics, biological factors, and homosexuality. Ask students “What then, if any, is the role of the environment?”

(Area addressed: Diversity consciousness of community and society)

Development

How do children learn to be prejudiced? How do minority children internalize oppression? Show the video *In the Eye of the Storm*. In small groups, have students discuss the film using prepared questions.

(Area addressed: Diversity consciousness of community and society)

After presenting information about parenting styles, discuss how culture may impact both what styles are used and their outcomes/effectiveness.

(Area addressed: Diversity appreciation and value)

Ask students to speculate about how parenting and child development might be influenced by different family structures, such as single parent, stepparent, multi-generational, and gay and lesbian parents. Share research findings with the class.

(Area addressed: Diversity appreciation and value)

Have students do a service learning project where they are partnered with an elderly person from a local nursing home or assisted living facility and visit with them several times during the semester. Have them write an essay about what they learned about the elderly from this experience. Relate to research on developmental changes in old age.

(Area addressed: Diversity appreciation and value)

Discuss environmental/cultural influences on development using Bronfenbrenner’s ecological model. Discuss how these influences may operate for children of different races, or for children with disabilities.

(Area addressed: Diversity consciousness of community and society)

States of consciousness

Discuss factors that correlate with drug use. Ask students if they think drug and alcohol usage is particularly high among a particular minority group, and then discuss research related to usage rates. Have students reflect on why they might have been wrong, and discuss the impact of stereotypes. Also examine gender differences in drug and alcohol usage and tie to earlier gender socialization discussion.

(Area addressed: Diversity consciousness of community and society)

Learning

Help students understand how stereotypes are learned. Divide the class into small groups and assign each group one of the 3 learning processes discussed in the text (e.g., classical conditioning, operant conditioning, and observational learning). Then give each group examples of stereotypes and ask them to specify how their assigned learning process operates to develop and maintain the stereotypes. For example, research on associative learning has shown that when target words (e.g., “Mexican”, “Jew” or “African-American”) are paired with negative terms people perceive the target words more negatively, because of higher-order conditioning (APA, 1998). After the groups report to the class, discuss how stereotypes might be “unlearned.”

(Areas addressed: Self identification, Diversity consciousness of community and society)

Memory

Discuss the reconstructive nature of memory, and how people often distort information to fit assumptions and cultural expectations (APA, 1998). Research indicates that our “schemas” influence what we recall about members of particular groups. Discuss examples with the class (c.f., Allport & Postman, 1947; Martin & Halverson, 1983).

(Areas addressed: Self identification, Diversity consciousness of community and society)

Thinking, Language, and Intelligence

Examine racial differences in intelligence test scores (and the link between education and intelligence). Divide students in small groups and ask them why they think these differences exist, writing down as many reasons as they can think of. Emphasize that most experts agree the racial gap in intelligence tests scores is environmentally, not genetically, determined. For example, discuss the effect of “stereotype threat.” Distribute the cartoon from “Tom the Dancing Bug” and then present Ogbu’s position that Blacks in the United States are a “castelike” minority (Goleman, 2002). Also introduce Rosenthal and Jacobsen's (1968) work on how teachers' expectancies about student abilities can lead to a “self fulfilling prophecy.” To highlight disparities in educational experiences and opportunities in the United States, read and discuss excerpts from Kozol’s (1991) *Savage Inequalities*.

(Area addressed: Diversity consciousness of community and society)

Discuss the use of “ebonics” and “spanglish” among minority groups in the United States.

(Area addressed: Diversity appreciation and value)
Motivation

Use Maslow’s hierarchy of needs to discuss the influence of social class on needs/motives. Would social class affect a person’s ability or desire to become “self-actualized?”

(Area addressed: Diversity consciousness of community and society)

Ask students to reflect on their own personal attitudes towards homosexual persons using Kite & Deaux’s scale (1986). Show the video On Being Gay. Ask students to take 5 minutes to write down their reactions (guided by questions); also ask them to write down what they think causes homosexuality. Discuss the correlates of homophobia and emphasize that most psychologists view sexual orientation as genetic/biological in origin.

(Areas addressed: Self identification, Diversity consciousness of community and society)

Discuss cultural and sub-cultural differences in the prevalence of eating disorders. Why is anorexia nervosa primarily a disorder of white middle-upper class girls? Have students read the essay “I’m not Fat, I’m Latina” (Haubegger, 2003).

(Area addressed: Diversity consciousness of community and society)

Emotions, Stress & Health

Explore cultural differences in emotion expression (e.g., Japanese, Awlad Ali Bedouins, Tahitians) (Bolt, 2002). Connect to language issues discussed earlier (e.g., Tahitian language lacks terms for sadness, longing, or loneliness). How might these differences lead to cross-cultural misunderstandings? Ask students for examples of emotions they feel comfortable or not comfortable expressing in public, and have them reflect on why. Discuss gender differences in emotion expression and how these differences might affect relationships between men and women.

(Areas addressed: Self identification, Diversity consciousness of community and society)

Discuss the relationship between health and social class. What foods are the least and most expensive? Do people from different social classes have equal access to health care, exercise facilities, etc.? How might this relate to factors such as obesity, diabetes, cancer, etc.?

(Area addressed: Diversity consciousness of community and society)

Personality

To show how culture influences identity, use Brilin’s (1988) Who am I? exercise. Ask students to write down 20 different statements in response to the question, and have them score their answers. Any “social response” receives an S. Those who have S scores higher than 20% are “collectivists” (define themselves in terms of social groups); those who have scores lower than 15% are “individualists” (define themselves mostly in terms of personal attributes).

(Area addressed: Self identification, Diversity consciousness of community and society)

Explore the issue of racial identity. Ask students to read and come to class prepared to discuss “Identity development in adolescence” and “The development of white identity” in Beverly Tatum’s book Why are all the black kids sitting together in the cafeteria?

(Area addressed: Diversity consciousness of community and society)

Psychological Disorders & Therapy

Have students complete an exercise that shows the effects of labeling those with psychological disorders (and how erroneous diagnoses can be self-confirming) (Bolt, 2002). The class is divided into two, with both groups receiving an identical sketch of “Tom M” (adapted from Kahneman & Tversky, 1973). One group is told that Tom M. is a mental patient in a state hospital. The other is told that Tom M. is a graduate student who hopes to work with children with disabilities. Both groups are then asked “might this outcome have been predicted when Tom M. was a senior in high school? On what basis?” The class can then discuss what happens when someone receives a label of schizophrenia, or ADHD, or learning disabled. Why do we label? Are there benefits of labels? What are some problems with labels?

(Area addressed: Diversity consciousness of community and society)

Divide students into groups and assign each group to one or two psychological disorders. Ask them to research gender, racial or ethnic, cultural, or social class differences in the incidence or course of the disorder. If they identify a difference (e.g., gender difference in depression), they should try to explain why this difference exists. Each group can then present their findings to the class.

(Area addressed: Diversity consciousness of community and society)

Explore the cognitive and social roots of stereotypes and prejudice (in group/out group dynamics, automatic stereotyping, etc.). Ask students to write a response to “How would you answer someone who claims they are not the least bit prejudiced?”

(Area addressed: Diversity consciousness of community and society)

Social Psychology

Explore the cognitive and social roots of stereotypes and prejudice (in group/out group dynamics, automatic stereotyping, etc.). Ask students to write a response to “How would you answer someone who claims they are not the least bit prejudiced?”

(Area addressed: Diversity consciousness of community and society)

What is racism? Ask students to write their own definitions. Show the video “True Colors” (about
racial discrimination). Have students reflect on their own biases by responding (privately) to questions such as “Do you believe you could fall in love with a black person?” and “You are walking down the street late at night. You see a black teenage boy on your side of the street, a white one on the other. Do you cross the street?” (Bolt, 2002). Also discuss the concept of institutional racism (versus personal prejudice).

(Area addressed: Self identification, Diversity consciousness of community and society, Diversity in a democratic society)

Ask students to read McIntosh’s article “White privilege: Unpacking the invisible knapsack” and then write a reaction paper. Have them identify privileges in their own lives and identify them as earned or unearned. (Area addressed: Self identification, Diversity consciousness of community and society, Diversity in a democratic society)

* These ideas come from both the authors and from the sources listed below. We would also like to acknowledge the contributions of Karen Droms and Janice Wilson Seeley from Luzerne County Community College. For more information please contact Marnie Hiester, mhiester@misericordia.edu

REFERENCES AND ADDITIONAL RESOURCES

Books and Articles


APA’s Task Force on Diversity Issues at the Precollege and Undergraduate Levels (1998). Sexual-orientation issues can be easily integrated into many classes. APA Monitor, 29(4).


APA’s Task Force on Diversity Issues at the Precollege and Undergraduate Levels (1998). Enriching the focus on ethnicity and race. APA Monitor, 29(3).

APA’s Task Force on Diversity Issues at the Precollege and Undergraduate Levels (1998). Talking about prejudice can be a powerful teaching tool. APA Monitor, 29(1).


Guthrie, R. V. (1998). Even the rat was white: A historical view of psychology (2nd ed.). Boston: Allyn and Bacon.


Videocassettes
Videocassette: Eye of the Storm/A Class Divided (ABC, 25 minutes)
Videocassette: True Colors (ABC, 15 minutes).
Videocassette: On Being Gay (TRB Productions, 80 minutes).

Web sites
Diversity web: http://diversityweb.org/
Multicultural superset: http://www.mhhe.com/socscience/education/multi/index.mhtml

This article was based on a poster presented at the 9th Northeast Conference for Teachers of Psychology (NECTOP) at Salem State College, Salem, Massachusetts, November 7, 2003.
We, as psychology teachers, know that our discipline is rich and varied. It covers the breadth and depth of human behavior—from fleeting reflexes to enduring memories, from falling asleep to falling in love. Yet most students enter the introductory course thinking that psychology deals mainly with personality, psychological testing, mental disorders, psychotherapy, and other aspects of clinical psychology. So it is no wonder that many are surprised to find themselves reading about the structure of the brain, optical illusions, the effects of jet lag, the cells of the immune system, prenatal risk factors, and all the other topics that they had never expected to encounter in introductory psychology. I’m sure I was just as surprised when I took Introductory Psychology myself, but the memory must have faded by the time I started teaching the course because it took a student’s comment to remind me of the problem. After what I thought was a particularly riveting lecture on vision, he approached me to ask, “What the heck does the eye have to do with psychology?” I did my best to explain the linkages between vision, mental processing, and behavior, but as I reflected on our conversation later, it dawned on me that the organization of my introductory course must be striking my students as a train wreck of randomly selected topics. A lecture on plant care would probably not have surprised them any more than my lecture on depth perception. For some, I bet, it was only the fact that “personality” and “psychopathology” appeared on the syllabus that kept them from dropping the course. In short, I had forgotten how important it is to give students a coherent framework in which the apparently disparate course topics link up to form the big picture that is psychology.

I now work hard to point out these linkages throughout my course, but to highlight them at the outset, I use a quick little active learning exercise on the first day of class. After defining psychology as the science of behavior and mental processes, I point out that “behavior and mental processes” includes everything of behavior and mental processes, I point out that “behavior and mental processes” includes everything, from the activity of single cells to the interactions of groups of people and that they can be interrelated in many ways. I then tell my students that their first class assignment is to watch and listen as I count to three and raise my hand, and that when I do, they are to raise their opposite hand. The students are puzzled, of course, but once I tell them the assignment will not be graded, they relax and do as I ask. I now have the opportunity to show them that even this apparently simple (and seemingly pointless) action was in fact a rather complex feat. It required the integration of numerous linked biological and cognitive processes involving sensation, perception, learning, memory, decision-making, and overt behavior—not to mention sensitivity to social influences, including norms governing compliance.

Reviewing the exercise step by step, I first note that, in order to follow my instructions, the students had to have an auditory system that collected the sound waves from my spoken instructions, transduced them into a stream of coded firing in neurons that make up their auditory nerves and transmitted this coded information to their brains. Their brains then had to engage in perceptual processing, comparing the features of the incoming sound information with vast amounts of information about language that was already stored in their memories and, when matches were found, recognizing the words and linking them to their associated meanings. Their brains also had to hold my spoken instructions in memory long enough to act on them by raising their hand at the appropriate time. When was the appropriate time? That decision was driven by visual information received by the students’ eyes, coded into a pattern of firing in the neurons that make up their optic nerves, and transmitted to their brains for translation into a perception of the movement of one of my arms. But how did they know which arm to raise? That additional decision depended on the students’ perceptual ability to categorize my arm movement as representing either the left or right side of my body—a task that may have involved mental rotation of their visual image of my body, because my right arm appears in their left visual field, and my left arm appears in their right visual field. Once they knew which arm I had raised, they had to process that information so as to select which arm they were to raise. Finally, the students’ brains had to use that information to execute an action, which meant directing neurons on the correct side of the motor cortex to fire so as to create just the right amount of contraction in some arm muscles, and just enough relaxation in other arm muscles to move their hands above their heads. And of course, sensory neurons in the arm and hand had to provide feedback to their brains to tell them when their hand had reached its destination.

If you try this exercise yourself, you might also wish to point out how social forces are linked to and interact with all these biological and cognitive processes. You can do this simply by asking the students why they followed your instructions. Their answers will undoubtedly refer to your status as their teacher, to the behaviors that are expected of teachers, and of students, and specifically to the fact that students are generally expected to follow...
their teachers’ instructions.

After telling my students the story of all the linked processes involved in this exercise, I ask them to imagine how they would do at this rudimentary task if they had no sensory or motor neurons, and no way to code, interpret, or process information from the environment. It does not take long before they realize why their introductory psychology textbook—and their introductory psychology course—contains sections on biological psychology, sensation, perception, consciousness, learning and memory, and thinking and decision-making, let alone chapters on human development and social behavior.

Now don’t get me wrong. You can use this little exercise every time you teach the introductory course and still have students who ask you what the eye has to do with psychology. But if your experience is anything like mine, the question will occur far less often than it otherwise would, and if you are really lucky, some students will even let you know that they are beginning to see how psychology’s many subfields all fit together.

Emerging Voices Explore Culture, Identity, and Growing Up Asian American

Reviewed by
Catherine Solomon, Connecticut College, New London, CT

YELL-Oh Girls!, edited by Vickie Nam, is a book that gives Asian American teenage girls a voice, and enables them to speak out about the positive and negative aspects of growing up in the United States. This book is the first anthology of Asian American teenage girls’ writing, and sets the stage for more to come. Nam’s mission is to, “increase cultural awareness, to teach each other the importance of self-love, and to promote self-expression” (p. xxxi). She has created a perspective that is not seen in television, books, magazines, or movies. As well, she has given Asian American teenage girls a chance to see that they are not alone, and shows their views to the rest of the country.

The book is a collaboration of work from approximately 100 young women across the country. The girls are all of Asian descent, but differ dramatically in their family history, socioeconomic backgrounds, and their current lives. They are Indian-, Korean-, Japanese-, Chinese-, and Filipino-Americans, and each brings a unique perspective to the book demonstrated through poems, essays, stories, and illustrations. Within the book, five sections were created with similar themes and concepts instead of having strict chapters. The common themes that were created deal with complex relationships with siblings, parents, grandparents, and friends; the search for self-identity, culture shock, and the struggle of being in between two cultures; typical adolescence problems including body image and peer pressure; racial prejudice, stereotypes and racism; and activism by finding a voice and speaking out. Also added to the anthology are quotes and works by Asian American women who are accomplished, have overcome differences, and strive to assist and guide young women. The mentor pieces aim to support the readers by showing similar stories that the women have experienced, and instill in them that they can accomplish and overcome as well.

YELL-Oh Girls! is an excellent book for any age, ethnicity, or gender. It is especially a helpful resource for Asian American teenagers, and anyone involved in their lives such as parents, educators, and counselors. Additionally, it can be important for teens, parents, and teachers of other ethnicities to read because it shows another cultural perspective, creates cultural awareness, and might illustrate similar experiences in other cultures. Furthermore, it can teach individuals and schools that they need to be more ethno-sensitive. The stories and poems in the anthology vary from heartwarming to heartbreak- ing but are well-written and from the heart. They are all real-life stories, and even though many girls face the same type of experiences, each piece still adds a distinctive touch to the collection. With their names and a short introduction before their pieces, these young women are held accountable for their work and prove that their voices counts. This allows the
reader to become more familiar with the girls and understand more about them and their work.

Vickie Nam’s creation of the first anthology of Asian American teenage girls’ writing is an exceptional accomplishment and a dream for her. She is not a professor, a psychologist, or a trained counselor, but an Asian American woman who was inspired to create a book on her culture and identity. Reading this book from a different cultural perspective, I have learned a great deal about the Asian culture. I now understand that Asian Americans often have to face many stereotypes and hardships while living in a society where they do not make up the majority, and Asian culture, rituals, and beliefs can sometimes clash with the “typical American lifestyle.” This book can help with both the growth of Asian American teenagers and with the rest of the readers.

G. Stanley Hall/Harry Kirke Wolfe Lecturers at the APA Convention

Each year, the APA Education Directorate and The Society for the Teaching of Psychology (APA Division 2) sponsor the G. Stanley Hall/Harry Kirke Wolfe Lecture Series at the APA Convention. Delivered by prominent researchers and scholars in Psychology, the Hall Lectures feature the latest in psychological research for teachers of introductory psychology. The Harry Kirke Wolfe Lecture is focused more deliberately on the teaching of psychology.

Friday, July 30, 2004
10:00 am – 10:50 am
Dan P. McAdams, Ph.D., Northwestern University
The Redemptive Self: Generativity and the Stories Americans Live By

11:00 am – 11:50 am
Tom Pyszczynski, Ph.D., University of Colorado at Colorado Springs
Why Do We Need What We Need? Searching for the Motive Beneath the Motives

Saturday, July 31, 2004
10:00 am – 10:50 am
Jessica Henderson Daniel, Ph.D., ABPP
Dept of Psychiatry, Children’s Hospital, Boston, MA
Teaching about Race and Ethnicity: Focus on Learning about Human Beings

11:00 am - 11:50 am
Jill Reich, Ph.D., Bates College
The Aim of Education

Selected Highlights of APA Convention Programs Sponsored by Psi Beta

Friday, July 30, 2004, 9:00 am – 9:50 am
Leadership Workshop
Chair: Kenneth Gray, PhD, College of DuPage
Sharon Burson, EdD, Temple College
One Minute Leader

Loren W. Cheney, EdD, Community College of Rhode Island
An Exercise to Develop Leadership Skills in Your Group

Saturday, July 31, 2004, 9:00 am – 9:50 am
Invited Address: Ruth Hubbard Cousins Distinguished Lecture
Chair: Kenneth Gray, PhD, College of DuPage
Ann T. Ewing, PhD, Mesa Community College, Mesa AZ
Teaching for Passion or Passion for Teaching?

For confirmed program schedule and locations of events listed above, please consult the APA Convention Program.
Punishment or Negative Reinforcement?  A Classroom Demonstration  
*James Politis, Teacher Emeritus*  
*Watkins Mill High School, Gaithersburg, Maryland*

I find that students have a hard time distinguishing the concept of negative reinforcement from punishment. In general it is easy for them to grasp positive reinforcement, yet negative reinforcement can be confusing.

I assume they have read their textbook definitions (although I could be accused of having a poor grasp of reality by making such an assumption) and I approach the topic with an analogy and a light-hearted demonstration. I have used this demonstration for 20 years with 3-5 classes each semester and it has been very successful.

**Materials required:**  
Two student volunteers. A sense of humor helps too.

**Demonstration:**  
Begin the demonstration by describing punishment. For example, “I assume you are all familiar with punishment. You may have been spanked, scolded, or been sent to your room when you were a young child. This represents punishment because it is an undesirable consequence or stimulus that is presented after you have exhibited a particular behavior. Punishment is still available for adults in the form of traffic fines or a detention.” I emphasize that a noxious stimulus is presented after a behavior therefore this is punishment.

**Punishment**  
This explanation is followed by an introduction of the demonstration that will include administration of punishment. I also describe what will occur in order to provide students with a comfortable description.

I ask for two volunteers. The first student will assist in administering a noxious stimulus and the second student will serve as the participant. I then tell both the students and the class that the noxious stimulus will simply be the constant repetition of a non-offensive word (e.g., *go, stop, tree*).

Questions are then formulated and presented to the student who has agreed to be the subject. For example, students can be asked to identify the state capital correctly. If the student is successful with this task, then they can be asked about additional state capital cities until they respond incorrectly. (Hint: It is important that you know the state capitals!) When the student responds incorrectly, the confederate student repeatedly utters the identified term for approximately 30 seconds. This represents a punishment because a noxious stimulus (repetition of the word) is presented after a behavior.

**Positive Reinforcement**  
I also provide an introduction into the concept of reinforcement. For example, reinforcement is receiving something that you like after you produce a behavior. Examples of reinforcements are money and extra privileges. Reinforcement is given after a particular behavior has been conducted. Using the example from above, a student could be provided with a piece of candy for every correct response.

**Negative Reinforcement**  
However, it can also be reinforcing *not* to receive a particular stimulus (usually unpleasant stimulus). In order to distinguish negative reinforcement from punishment, the questioning of a student is conducted, but the order in which the noxious stimulus is presented is altered. For example, I tell the student that “Now I’m going to ask you some questions and you can AVOID this noxious stimulus (repeating of a nuisance word) by answering correctly.” I ask the confederate student to begin constant repetition of the nuisance word. Then I introduce a simple mathematical problem (How much is 2 + 2?) to the student acting as a subject. Ostensibly the student will respond correctly, at which point the confederate student will cease repeating the word. I then explain that an unpleasant stimulus was removed after a behavior (correct response), therefore this demonstration illustrates negative reinforcement. This can be directly contrasted with the first example during which an incorrect answer was followed by the constant annoying repetition of the word.

*This simple exercise is particularly entertaining for students and it provides a useful illustration that helps students to understand this difficult set of concepts.*
Using *ConcepTests* for Formative Assessment

Stephen L. Chew, PhD
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Here is a scenario that occurs all too often in the psychology classroom. A student studies hard for an exam and feels confident about the material. He or she may even feel confident after taking the exam. But the results are much worse than the student expected, leaving the student to grumble, “That sneaky instructor always asks tricky questions.” The instructor, on the other hand, has delivered a brilliant set of lectures and is confident that the students have soaked in all the knowledge. But on the exam, student performance reflects a poor understanding or a fundamental misunderstanding of the concepts, leaving the instructor to grumble, “Those lazy students just don’t pay attention.” These scenarios exemplify three major obstacles to student learning. The first is when the students have an inaccurate perception of their own understanding. The second is when the instructor has an inaccurate perception of the students’ level of understanding. The final problem is when students bring misconceptions into the class or they form misconceptions from readings or lecture. Research indicates that these misconceptions, which are often highly intuitive or strengthened through years of confirmation bias, are strongly resistant to correction even feel confident after taking the exam. But the results are much worse than the student expected, leaving the student to grumble, “That sneaky instructor always asks tricky questions.” The instructor, on the other hand, has delivered a brilliant set of lectures and is confident that the students have soaked in all the knowledge. But on the exam, student performance reflects a poor understanding or a fundamental misunderstanding of the concepts, leaving the instructor to grumble, “Those lazy students just don’t pay attention.” These scenarios exemplify three major obstacles to student learning. The first is when the students have an inaccurate perception of their own understanding. The second is when the instructor has an inaccurate perception of the students’ level of understanding. The final problem is when students bring misconceptions into the class or they form misconceptions from readings or lecture. Research indicates that these misconceptions, which are often highly intuitive or strengthened through years of confirmation bias, are strongly resistant to correction through traditional instruction. This article introduces the *ConcepTest*, a brief, active learning technique that helps to address these three problems.

*ConcepTests*, developed by Mazur (1996) for teaching physics, provide a means of formative assessment for teacher and student. Formative assessment methods, such as the one minute paper, are intended to reveal the teacher and student. Formative assessment methods, such as the one minute paper, are intended to reveal the teacher and student. Formative assessment methods, such as the one minute paper, are intended to reveal the teacher and student.

Mazur (1996) developed *ConcepTests* as part of a larger teaching method he calls Peer Instruction to improve the teaching of introductory physics. He recognized that physics has many conceptually difficult and counterintuitive ideas, and that students become deeply frustrated in trying to master those ideas. Obviously the same can be said for psychology. *ConcepTests* have the advantage of being highly engaging to students and providing immediate feedback to both students and instructor about the class’s level of understanding of a concept. They can be used to highlight and help correct common yet tenacious student misconceptions. Furthermore, they are easy to prepare, take relatively little class time and can be used in any size class. Mazur demonstrated that *ConcepTests* are effective in enhancing student learning in physics, and Jacobs (2000) has successfully adapted them to chemistry instruction. It is worthwhile therefore, to explore whether *ConcepTests* can be adapted for the teaching of psychology.

First I will discuss how to create a *ConcepTest* and then I will describe the procedure for using them in class. A *ConcepTest* is a problem that exemplifies a key concept along with a set of possible answers, some of which are intuitively appealing but wrong. Essentially, it is a good multiple choice test item. Here is an example of one for correlations:

A marriage counselor studies four different tests designed to predict marital happiness to see which one is best. She administers the four tests to 80 couples who are about to get married. After two years, she measures the marital happiness of the couples and correlates it with each of the four tests with the following results:

- Test 1: $r = -0.73$
- Test 2: $r = 0.62$
- Test 3: $r = 0.25$
- Test 4: $r = 0.10$

If the therapist wanted to pick the single best test to use in her work, which one should she choose and why?

The correct answer is Test 1. It has the strongest correlation, and therefore is the best predictor. Note that this *ConcepTest* addresses a common student misconception about correlations, that a positive correlation is always stronger than a negative one. One may say this repeatedly in lecture, but students will still miss this kind of question on an exam.

The key to the effectiveness of *ConcepTests* is how they are used in the classroom. Here is the general procedure for their use with the approximate time for each step:

1. Present the *ConcepTest* to the class, give them time to think about which answer they believe is correct, and instruct them on step 2 – about 3 minutes.
2. On a given signal from the instructor, all students publicly indicate their answer by raising their hands with the number of fingers of their chosen alternative.
3. Students pick a classmate, preferably with a different answer, to discuss their choices – 2-3 minutes.
4. Repeat step two to see how choices have changed, and if there is a consensus.
5. Have students explain their choices and discuss the correct answer as a class – 2+ minutes.

Note that the entire class must respond publicly and simultaneously, and students must justify their answer to their classmates. Students are actively engaged and are learning from each other as well as the teacher. They then get immediate feedback about the accuracy of their choices. The instructor also gets immediate feedback about how well the class understands a concept and
Whether or not more explanation is needed.

When I have used a ConcepTest similar to the one above about correlations in class, students have often asked how a low score can be related to something positive like marital happiness. I explain that Test 1 may be measuring the number of arguments or conflicts, which would be negatively correlated with happiness. When students ask this kind of question, it is an indication that they are aware of a discrepancy in their understanding of a concept. This leads to fruitful class discussion. Occasionally an insightful student might ask if Test 2 might be better because it would be more intuitively understandable to people than Test 1 because people usually associate an increase with a positive outcome. This is a perfectly reasonable argument to make which requires a correct understanding of the strength of correlations.

ConcepTests are no harder to develop than a good multiple choice question. In fact, I emphasize to my students that these ConcepTests are similar to the kinds of questions they will see on the exam, which increases their engagement. According to Mazur (1996), a good ConcepTest has the following properties. They should:

- Focus on a single concept
- Require conceptual understanding to solve
- Have adequate response alternatives, ideally the incorrect answer choices should reflect the student’s most common misconceptions, and
- Be neither too easy nor too difficult, with about a 60 – 80% initial correct response rate.

Here is a ConcepTest for learning.

Three-year-old Nate is playing in the living room when he hears the loud noise of the garage door opening. His dog starts barking and Nate is afraid. A minute later Nate’s mother walks in the door, home from work. After several days of this, Nate now runs to the door with glee when he hears the loud noise and yells, “Mommy’s home!” This is an example of:

1. Habituation
2. Classical Conditioning
3. Operant Conditioning
4. Observational Learning

The correct answer is “2. Classical Conditioning,” because the sound of the garage door opening takes on meaning to Nate, signaling that his mother is home. This question helps clarify the difference between classical and operant conditioning. Once it is established that this is an example of classical conditioning, then the class can work out which parts are the conditioned stimulus, unconditioned stimulus, conditioned response, and unconditioned response.

Here is a ConcepTest for Piagetian Theory.

Jean Piaget walks into a pizza parlor and orders a small pizza. “Do you want that cut into six slices or eight slices?” asks the waiter. “Oh, six slices,” says Piaget, “I couldn’t possibly eat eight slices.” Piaget is exhibiting:

1. Accommodation
2. Assimilation
3. Lack of Conservation
4. Egocentrism

The answer is “3. Lack of Conservation.” The other answers represent Piagetian concepts that might easily be confused with the correct answer.

Thus far I have discussed how ConcepTests are developed and how they are used. Students find them fun and engaging, but the key issue of course is whether they improve student learning. Since introducing ConcepTests in my courses, I’ve gathered data that indicate that they do indeed improve student learning. I teach one section of general psychology with about 50 students each semester. In order to test the effectiveness of ConcepTests, I have done the following. One semester I used a ConcepTest similar to the one above in teaching correlations. The next semester I taught correlations in exactly the same way without the ConcepTest (basically the way I’ve taught correlations most of my career). On the exam for both sections, I had the same three questions about correlations. One was factual, simply asking which among four correlations was the strongest, with a negative correlation being the strongest. The second question was an application question, asking which of four statements was a legitimate conclusion that could be drawn from a correlation. Three of the statements were causal and one, the correct answer, was descriptive. This tested the concept that correlations do not entail causality, another common misconception. Finally I had a probe question for understanding. I have students take another ConcepTest about correlations similar to the one above, and asked them to choose the correct answer and then write out an explanation for their answer. To get full credit, they needed to choose the correct alternative and have the correct explanation. Since this was the only short answer question on the test, it did not take long to grade and it gave me insight into student understanding. On all three measures, factual, application and understanding, the class that had the ConcepTest had a higher percentage of correct answers. Of course, this is not a true experiment because there was no random assignment to groups and the experimenter, me, was aware of the conditions. But even though it is imperfect, it is still evident that ConcepTests are effective in improving student learning, especially in light of their success in other fields.

To summarize, I have described the development and use of ConcepTests for formative assessment. As a tool for formative assessment, ConcepTests have many advantages:
a. Concept Test is presented to the class and the students decide on an answer.

b. Everyone simultaneously indicates the answer they believe is correct.

c. Each student picks another student, preferably one with a different answer, and tries to reach a consensus.

d. A second poll is taken to see where the class stands. The alternatives are then discussed and the correct answer is revealed.

- They give feedback to both the student and teacher about the level of student understanding.
- They are highly engaging to students.
- They take little preparation or class time.
- They can be used with any size class.
- They stimulate class discussion.
- Students learn from each other as well as the teacher.
- They make students aware of intuitive but incorrect beliefs they hold about psychology.
- They give a preview to the class about the kinds of questions they can expect on an exam.

I have also gathered evidence that they are effective in improving student learning. They are now a regular feature of my teaching and I encourage other instructors to try them.

REFERENCES


For more information about this exercise, contact:
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Recognizing Outstanding High School Teachers of Psychology

In 2003, the APA Teachers of Psychology in Secondary Schools (TOPSS) honored two individuals with the annual TOPSS Excellence in Teaching Award. Audrey Dill, Monmouth Regional High School, Tinton Falls, NJ, and Rob Johns, Westside High School, Omaha, NE, were commended for exemplary teaching and for their efforts to promote vigorous student involvement in psychology beyond the classroom and positive applications of psychology in the school community.

The Society for the Teaching of Psychology (APA Division 2) bestowed the 2003 Moffett Memorial High School Award to Jim Matiya, Carl Sandburg High School, Orland Park, IL. Mr. Matiya was recognized for his creative commitments to the teaching of psychology in a high school setting.

Nominations are currently being solicited for the 2004 TOPSS Excellence in Teaching Award. For criteria and nomination procedures, please contact Mayella Valero at mvalero@apa.org.

TOPSS Invited Addresses Focus on International and Multicultural Issues

The TOPSS Invited Addresses at the 2004 APA Convention in Honolulu, Hawaii will highlight topics on international, multicultural, ethnic minority, gender, and indigenous issues relative to education and the teaching of psychology.

**Friday, July 30, 10:00 AM to 10:50 AM**

*Internationalizing the Psychology Curriculum: Looking Back and Ahead*

Harold Takooshian, PhD, Fordham University, New York, NY

**Friday, July 30, 11:00 AM to 11:50 AM**

*Teaching the Psychology of Gender: International, Power, and Personal Issues*

Lynn H. Collins, PhD, La Salle University, Philadelphia, PA

**Saturday, July 31, 10:00 AM to 10:50 AM**

*Latina and Latino Mental Health Issues*

Marie L. Miville, PhD, Teachers College, Columbia University, New York, NY

**Saturday, July 31, 11:00 AM to 11:50 AM**

*Psychology Curriculum in the Schooling of American Indian Youth and Sasquatch: Guess Which is Harder to Find?*

Justin (Doug) McDonald, PhD, University of North Dakota, Grand Forks, ND

More detailed information will be available in the spring. Stay tuned for various announcements to be posted on the TOPSS website (http://www.apa.org/ed/topss/homepage.html) and in the PTN Spring 2004 issue.

Funding Opportunity: Nationwide High School Psychology Program

Each year the American Psychological Foundation (APF) allocates up to $2,000 in seed money for funding requests through its **Nationwide High School Psychology Program**, which is administered by the APA Education Directorate. Those states with a scholarship program in psychology or state-level programs to advance high school psychology, as well as those states interested in establishing such programs, may request funding by contacting Mayella Valero at 202-572-3013 or by e-mail at mvalero@apa.org.
PT@CC POSTINGS

Announcing the 2004 APA Teaching Tips Contest
For Psychology Teachers at Community Colleges

The APA Committee of Psychology Teachers at Community Colleges (PT@CC) invites you to participate in the new APA Teaching Tips Contest! Sponsored by PT@CC and Worth Publishers, the Teaching Tips Contest aims to encourage sharing of instructional techniques that community college faculty have developed and used in psychology classes.

Community college instructors (and other 2-year college instructors) are invited to submit an original demonstration, an individual or group class activity, an interactive teaching/learning module, or other pedagogy designed to illustrate a psychological concept or theory. Preference will be given to active-learning approaches. Winning entries will be made available as a teaching resource on the PT@CC Web site at www.apa.org/ed/pcue/ptatchome.html.

The competition is open to psychology teachers who are members of PT@CC. Faculty members interested in joining PT@CC can obtain more information on the Web or by contacting Martha Boenau at 1-800-374-2721, ext. 6140 (Email: Mboenau@apa.org). An award of $400 will be given to the first place winner; $300 to the second place winner; $200 to the third place winner; and $50 each to two honorable mention winners. Certificates for all winners will be presented by PT@CC at the APA annual convention.

Look for more details about the Teaching Tips Contest on the PT@CC website. Entries must be postmarked by May 1, 2004.

PT@CC Highlights and Events for the APA Convention in Hawaii

The following is a tentative schedule for PT@CC-sponsored events at APA’s Annual Meeting in Hawaii on July 28-August 1, 2004. For periodic updates and confirmed times and locations of events, please check the PT@CC website at http://www.apa.org/ed/pcue/ptatchome.html.

Friday, July 30, 10:00 AM to 10:50 AM
Surviving Outcomes Assessment
Chair: Ann T. Ewing, PhD, Mesa Community College
- Bill Hill, PhD, Kennesaw State University
  Making the Most Out of an Assessment Mandate: Opportunities and Challenges
- Gayla Preisser, PhD, Mesa Community College
  Developing a Meaningful and Painless Outcomes Assessment Program
- Donna Stuber-McEwen, PhD, Friends University
  A Leap of Faith: Coordinating 2- and 4-Year Student Outcomes

Friday, July 30, 10:00 AM to 10:50 AM
Innovative Teaching Techniques
Chair: Tonja Ringgold, EdD, Baltimore City Comm College
- Heather LaCost, MA, Waubonsee Community College
  Surfing the Online Wave: Possibilities and Wipeouts
- Jaye Van Kirk, MA, San Diego Mesa College
  Personalizing Your Students’ Learning Experiences

Saturday, July 31, 10:00 AM to 10:50 AM
The Last Lecture
Chair: Donna K. Duffy, PhD, Middlesex Community College
- Wilbert J. McKeachie, PhD, University of Michigan
  Lessons I Have Learned
- Robert L. Johnson, PhD, Umpqua Community College
  Bridging the Two-Culture Divide

Saturday, July 31, 2004, 11:00 AM to 11:50 AM
PT@CC Invited Address
Chair: Patricia Puccio, EdD, College of DuPage
- Bernardo J. Carducci, PhD, Indiana University Southeast
  Everything You Ever Wanted to Know About Shyness But Were Too Shy to Ask

PT@CC Invited Address to be followed by a reception for Dr. Carducci and the PT@CC Award Winners from 12:00 Noon to 12:50 PM.

WORKSHOPS & TEACHING INSTITUTES

TOPSS-Sponsored Program at SIOP
Sat., April 3, 2004, 1:30 PM to 5:30 PM
Teaching Institute on I-O Psychology in the High School Curriculum
Society for Industrial/Organizational Psychology (SIOP)
Erie Room, Sheraton Chicago Hotel & Towers
301 East North Water Street, Chicago, Illinois

APA, TOPSS, and the Society for Industrial/Organizational Psychology (SIOP) are sponsoring this program to assist high school teachers in introducing I-O Psychology to students. At this teaching institute, I-O psychologists will provide participants with an overview of the history and core topics in the field and examples of activities and demonstrations to spark student interest and learning in the field. Enrollment is limited to 25 participants and registration fee is $35. Please register on or before Monday, March 13, 2004. For questions, contact Dr. Jane Halpert at 773-325-4265 or by e-mail at jhalper@depaul.edu.

WPA Program Featuring David Myers
Sunday, April 25, 2004, 9:00 AM to 12:00 NOON
Teaching Introduction to Psychology
Western Psychological Association (WPA) Meeting
Hyatt Regency Phoenix at Civic Plaza, Phoenix, Arizona

The APA Education Directorate, Teachers of Psychology in Secondary Schools (TOPSS) and Psychology Teachers at Community Colleges (PT@CC) are pleased to offer this special workshop, featuring a series of three presentations. David Myers will deliver two invited presentations entitled “Thirty-Five Years Professing Psychology: Lessons I Have Learned” and “The Powers and Perils of Intuition.” Ly Tran-Nguyen, Denise Preisser, and Gayla Preisser will discuss “Using the Brain to Learn: Applying Brain Research in the Teaching of Introductory Psychology.”

There is an additional fee for attending this workshop. Please check the WPA website for information on registration fees at http://www.westernpsych.org/index.cfm.

TOPSS Workshop at SWPA Giving Tips on Psychology Awareness
Fri., April 9, 2004, 8:00 AM to 11:00 AM
Getting to Know Psychology: Tips for Promoting Psychology Awareness in the Classroom, the School and the Community
Southwestern Psychological Association (SWPA)
Alamo Room, Sheraton Gunter Hotel
205 East Houston Street, San Antonio, Texas

Presenters:
Marissa M. Sarabando, Memorial High School, McAllen, TX
Margaret J. Davidson, Berkner High School, Richardson, TX

Misinformation and misperceptions about psychology exist in all communities. Even students of psychology come into the classroom with some very interesting ideas about what they think will be covered in the course. This three-hour workshop will feature tips on how to promote psychology awareness in the classroom, the school campus, and the community. The workshop will provide attendees with:
- Tried and true classroom activities that will highlight important ideas and concepts of the science of psychology
- A better understanding of the TOPSS Psychology Awareness Initiative and suggestions on how to implement various projects to promote awareness
- Information on student research projects and competitions
- Handouts of the activities, suggestions and research information presented in the workshop along with information about TOPSS membership.

Participation at this workshop requires registering for the SWPA Conference. Onsite registration fees are $60 for SWPA members and non-members; $35 for students; and $45 for Associate members. For registration and program information, please visit SWPA’s website at http://www.swpsych.org/.

Workshop on Responsible Conduct of Research in Psychological Science
April 13-14, 2004
Marriott-Wardman Park Hotel, Washington, DC
Sponsored by the American Psychological Association and the DHHS Office of Research Integrity

For information, please check the APA website at http://www.apa.org/science/ori_workshop.html.

For more information on TOPSS and PT@CC programs, please check the following websites:
PT@CC REMINDERS!

Visit the PT@CC Web site for details on...

- The 2004 Electronic Project Contest
- The 2004 APA Teaching Tips Contest
- The 2004 PT@CC Elections
- Regional events for Psychology Faculty
- Updates on PT@CC events at the APA Convention

www.apa.org/ed/pcue/ptatcchome.html