

Program Assessment Report

Unit: Psychology

Program name: Undergraduate

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In the past six years the Undergraduate Program Committee (UPC) has been working on the development of five well defined goals for student learning and skill development for CSU psychology majors. (Note: the UPC consists of all full-time faculty who routinely teach undergraduate courses.) These goals have been reaffirmed by the faculty in a departmental retreat on August 2005. Below is a list of the goals, outcomes, findings, reviews, and actions that have been taken in past years and during the past year, and any improvements that have been observed.

Goal #1

Majors will develop a broad knowledge of the fundamental areas of psychology (as defined by the outline of a typical introductory psychology textbook).

Outcome measure #1: Majors must complete minimum of 36 CH Psychology courses with "C" or better.

Research completed: Major requirements have been compared with other state supported universities and Transfer Assurance Guideline requirements.

Findings: Curriculum requirements have been found to be comparable to or exceed those of most other Ohio state-supported universities.

Review: UPC has discussed findings.

Actions: Requirements have been retained.

Improvements: Not applicable

Outcome measure #2: Majors will take courses in a wide variety of areas that form the traditional core taught at most universities.

Research completed: Comparisons of required and typical electives taken by CSU students with items on Advanced GRE have been made.

Findings: Majority of GRE items are covered by required and elective courses taken by most majors.

Review: UPC and Department have discussed findings.

Actions: Major advisors are informed that students should be advised to take a wide variety of traditional psychology courses if applying to psychology graduate programs.

Improvements: A review of the textbooks used by different professors was undertaken, and part-time faculty who did not adhere to the aforementioned outcome were asked to change their curricula and related teaching materials. The textbook of one professor was found to be unacceptable, and he was asked to replace it.

Outcome measure #3: Graduating majors will demonstrate significantly greater knowledge of fundamental areas than students who have not taken psychology courses. (A “large” effect size [Cohen’s $d > 0.8$] is used as the criterion to determine significant enhancement of knowledge or learning [see article describing the rationale and methods for deriving “d” that was included in last year’s report])

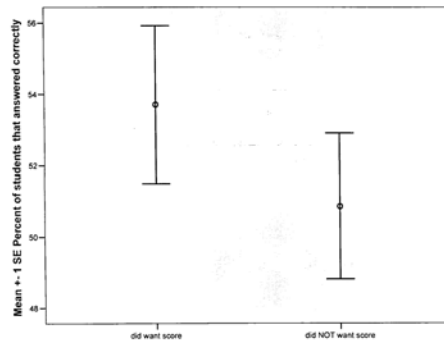
Research completed in 2005: Department exam has been administered to majors and to introductory psychology students.

Findings: Majors with > 9 CSU psychology courses demonstrated significantly more knowledge (Cohen's $d > 2$) in psychology than introductory students.

Review: UPC has discussed implications and Department has been informed of findings.

Actions: For further evidence that this goal has been achieved, beginning in Fall, 2005, the Psychology Department has required that majors take an Exit Evaluation, consisting of an objective examination covering essential psychological science, as a graduation requirement.

Improvements: Sixty two students completed the Exit Evaluation exam in 2005-2006, and 173 students completed the Exit Evaluation exam in 2006-2007. Preliminary results suggest a confirmation of outcome measure 3. The mean correct score for students completing the exam in 2006-2007 was 52%, a slightly lower score than the one obtained in 2005-2006, which was 55.7%. Both means are considerably above chance (20%). The overall reliability of the exam was similar to the one reported in the previously report (Cronbach Alpha= .852). Analyses of specific core areas will be conducted next year. Additional analyses of the most recent survey ($n=173$) were conducted to evaluate the affect of motivation (as measured by wanting to receive feedback regarding test scores) and exit exam test scores (see also Figure 1). This analysis confirmed that motivated students scored higher than non-motivated students (Mean=53.7 vs. 50.9, $p<0.01$).



Outcome measure #4: Students completing psychology courses will display significantly more knowledge/skills in area (Cohen's $d > 0.8$) than students starting the course.

Research completed: Between 2002 – 2004, most full time faculty who regularly taught undergraduate psychology courses conducted pre-test vs. post-test

evaluations of students in their courses or have compared performance of students completing course with that of students who have not taken the course.

Findings: All faculty have reported significant improvement or higher levels of knowledge of the students in their courses.

Review: The UPC has discussed the findings and reported these to the department faculty.

Actions: Although we no longer ask all faculty to conduct pre-test/post-test evaluations or conduct comparisons of their students completing their courses with those students who have not, Assistant and Associate-level faculty have been advised that including results of pre-test vs. post-test evaluations of students in their courses in their teaching portfolios will be useful in determining competence/excellence in teaching, which is necessary for promotion.

Improvements: During the past academic year only a small portion of the faculty carried out the self study. Thus, insufficient data are currently available. During the upcoming academic year, the UPC will remind faculty of this recommendation.

Goal # 2

Majors will acquire advanced knowledge in at least three core-areas of psychology ([1. Abnormal, Social, Personality] [2. Biological Bases of Behavior] [3. Learning, Cognition, Perception, History]).

Outcome measure #1: Students must complete at least one course in each of these areas with "C" or better.

Research completed: Major requirements have been compared with other state supported universities.

Findings: Curriculum requirements have been found to be comparable to state supported other universities.

Review: The UPC has discussed the findings.

Actions: No action necessary.

Improvements: Not applicable.

Outcome measure #2: Graduating majors will demonstrate significantly greater (Cohen's $d > 0.8$) knowledge in a minimum of three core areas in psychology.

Research completed: Department exam was administered to psychology majors and to introductory students in 2001-2002 and to 2002-2003 graduating classes.

Findings: Majors with more than 9 CSU psychology courses demonstrated significantly more knowledge (Cohen's $d > 1$) in all core areas than introductory students.

Review: Department has been informed of findings and UPC has discussed implications; further evidence of majors' knowledge of core areas of psychology was recommended.

Actions: Beginning in Fall, 2005, all graduating psychology majors have been required to take an Exit Examination covering the core areas in psychology (those specifically covered in the Advanced GRE for psychology).

Improvements: Exit Evaluation exam was administered and the data were collected. Preliminary analyses established the level of the students' body of knowledge. Additional analysis showed a significant correlation between GPAs and the Exit exam test scores among those who wanted feedback ($r=.567$, $p<0.01$), which indicates that the test has a high degree of predictive validity. Additional analyses are planned for next year which will determine the students' performance in the core areas of psychology, e.g., learning, memory, cognition, perception, biological bases of behavior, history, abnormal and clinical, personality, social, statistics and methodology, developmental, motivation/emotion.

Goal #3

Majors will learn basic methodological and statistical procedures typically used in conducting psychological research.

Outcome measure #1: Majors must complete courses in Behavioral Science Statistics and Laboratory Procedures with a "C" or better.

Research completed: Program requirements were compared with similar programs at other state supported universities.

Findings: Requirements have been found to be comparable to those of other state supported universities.

Review: The UPC discussed the findings.

Actions: Curriculum requirements were retained.

Improvements: Not applicable.

Outcome measure #2: Students completing statistics course will display significantly more knowledge/skills (Cohen's $d > 0.8$) in area than students starting the course.

Research completed: Beginning in Fall 2005 all faculty teaching the statistics courses were asked to conduct pre-test vs. post-test evaluations of students in their statistics course.

Findings: Results from one section were obtained. Significant learning was evidenced.

Review: UPC discussed findings and agreed that all instructors of the statistics course should conduct pre-test vs. post-test evaluations of students in their statistics courses.

Actions: Beginning in Fall 2006 all faculty teaching the statistics course (PSY 311) were asked via memo from the Chair of the UPC to conduct pre-test vs. post-test evaluations of students in their statistics course.

Improvements: None of the instructors of PSY 311 provided pre-test/post-test evaluations of their students. In Fall 2007, the UPC will discuss how to obtain better compliance with this request or will develop another approach for gathering data from students of individual courses

Outcome measure #3: Students completing statistics course will display significantly more (Cohen's $d > 0.8$) knowledge/skills in area than students who have not taken course.

Research completed: Department exam containing questions pertaining to statistics and methodology was administered to psychology majors and to introductory students in 2001-2002.

Findings: Students who have taken statistics course demonstrated significantly more knowledge (Cohen's $d > 2$) in statistics than introductory students.

Review: UPC has discussed findings. Further evidence of learning was recommended.

Actions: Beginning Fall, 2005, all graduating majors were required to take an Exit Examination that contains test items covering statistics and methodology.

Improvements: The mean percent correct on the methodology/statistics questions was 62.8%, which is considerably above chance (20%). Requirement that graduating majors take the Exit Evaluation will be maintained.

Goal # 4

Majors will learn how to write APA style conceptual and empirical research reports.

Outcome measure # 1: Majors must write a minimum of one empirical APA style report in PSY 412 at a level of "C" or better.

Research completed: Syllabi of all PSY 412 courses were evaluated for determination of meeting this outcome.

Findings: All sections of PSY 412 were determined to meet this outcome.

Review: The UPC discussed the inadequacy of this requirement for determining proficiency in writing empirical research reports.

Action: A standard set of rubrics was developed in 2005 (see Primary Trait Analysis of Undergraduate Empirical Research Papers [PTAUERP] included with last year's report) to assess the quality of empirical papers written in PSY 412.

Improvements: A more objective method of assessing the quality of the separate sections of empirical APA style reports was established.

Outcome measure #2: Majors will demonstrate proficiency in writing APA style conceptual and empirical reports.

Research completed: Representative student papers from psychology Writing Across the Curriculum (WAC) courses and from PSY 412 were collected and were evaluated for quality via standardized rubrics in 2001-2002. Beginning in the Spring, 2005, Fall, 2005, and Spring, 2006 semesters, all faculty teaching PSY 412 were asked to submit a random sample (3 students per section) of final empirical research reports written by their students to the UPC for future assessment of writing proficiency using the PTAUERP.

Findings: Analyses of the 2001-2002 papers suggested that significant improvement in writing skills was needed. A random sample of PSY 412 papers collected after the Fall 2006 semester were evaluated by undergraduate faculty using the PTAUERP. The results indicate that the following areas in the PSY 412 sample papers were determined to demonstrate acceptable proficiency (average score 2.8 and above on a 1-4 point scale): "Title," "Abstract," "Introduction," "Methods," and "Technical Preparation". The following areas were determined to be in need of improvement (average score 2.7 or below): "Results," "Discussion," and "References".

Review: UPC discussed the 2001-2002 findings and department faculty were notified that improvement in writing APA reports was needed. The findings from the PTAUERP analyses will be discussed by the UPC in Fall 2007.

Action: A specific course (Writing in Psychology) that utilizes WAC criteria was designed to enhance writing skills of majors and was implemented at the beginning of Fall 2003. Due to the limited sample of PSY 412 papers evaluated using the PTAUERP this past year, we will collect another sample after the Fall 2007 semester and do the evaluation process again.

Improvements: Faculty has determined that writing skills of students taking Writing in Psychology course are significantly better than those of comparable students who had not taken course.

Goal #5

Majors will acquire information and skills from their psychology curriculum experiences that result in tangible benefits, e.g., to obtain employment related to their training and/or to be accepted into post-baccalaureate training programs

Outcome measure #1: At least 50% of majors will obtain jobs related to their psychology training or be accepted into post-BA training programs.

Research completed: Surveys were sent to 2001-2002 graduates asking about their getting psychology-related jobs and/or getting accepted into post-BA training programs.

Findings: Over 50% of graduates reported obtaining jobs in which psychology training is relevant or have been accepted into post-BA training programs.

Review: UPC discussed implications and Department was informed. Further evidence of students' success in post-BA activities was recommended.

Action: Beginning Spring 2006, the Exit Evaluation included a survey, which will be repeated on a yearly basis, to gauge the progress of students regarding application to post BA training programs and psychology related jobs.

Improvements: Preliminary analyses indicate that over 30% of graduates who reported applying for a job related to their major obtained jobs in which their psychology training is relevant. Twenty-one percent applied for post-BA training programs, and of these 53.3% have been accepted. Further analyses of subsequent survey results will be conducted. Also, since the Exit Survey is conducted in the last semester prior to graduation, these percentages likely do not adequately reflect student success in getting jobs or getting accepted into post-BA training programs. Thus, a similar survey sent to graduates after one year may be more appropriate. The UPC will discuss the procedures for doing this in Fall 2007.

Outcome measure #2: At least 90% of psychology students will be personally satisfied with their psychology coursework and believe the faculty was successful in meeting their educational needs.

Research completed: All psychology courses are evaluated by way of Student Evaluation of Instruction (SEI) forms at the end of each semester. A simplified course and instructor evaluation form was also developed and filled out by student volunteers in 10 undergraduate courses both prior to the end of the Fall, 2004, semester and shortly after the semester ended. Beginning Spring 2006, graduating majors were also required to complete a departmental survey in the Exit Evaluation asking questions about their satisfaction with their coursework.

Findings: Mean SEI course and instructor ratings was 4.2 and 3.8 (on a 1-5 Likert scale) consecutively for Spring 2006 and Fall 2007. Over 90% of students reported on both surveys that their courses and instructors to be fair to excellent. Evaluation scores in all seven areas covered in the simplified survey were positive, with more than 90% of students reporting satisfaction, on both surveys. Scores were virtually identical in both the before and after survey. However, the evaluation scores (sum of scores for seven areas covered) in both surveys were found to be negatively correlated with the workload in upper division courses (i.e., the higher the reported workload the lower the overall evaluation) and positively correlated with the students' expected or earned grade in all courses

(i.e., the greater the students' expected or earned grade in a course the higher the overall evaluation).

The 2006 Exit Evaluation survey results indicated that only 8.4% of the students reported that they were not satisfied with the program, whereas 22.5% were very satisfied. In the 2007 Exit Evaluation 9.1% of the students reported that they were not satisfied with the program, and 21.3% were highly satisfied. Satisfaction in the most recent survey was significantly correlated with the student's GPA ($r=.765$).

Because many majors are transfer students who take their lower division courses elsewhere, an analysis of most satisfying courses as a function of course level was conducted for both surveys. This analysis indicated that for 2006 and 2007 58% and 54% of the courses endorsed were 300 level courses, respectively. The 400 level courses were endorsed by 32% and 24%, respectively. The difference in satisfaction between the 300 and 400 level courses most likely reflects that fact that far more 300 level courses than 400 level courses are elective courses. Specific courses that were most satisfactory for 2006 included: PSY 412, 481, 487, 385, 349, and 311. The most satisfactory scores for 2007 included: PSY 412, 396, 372, 311, 342, and 385.

Review: Department has been informed of SEI results and UPC has discussed implications. Findings from the simplified survey and Exit Evaluation survey will be discussed by UPC in Fall 2007.

Action: Exit survey results will continue to be analyzed.

Improvements: NA

Outcome measure #3: At least 75% of psychology graduates will be satisfied that their educational experience in psychology provided them with tangible benefits.

Research completed: Surveys were sent to 2001-2002 grads asking their degree of satisfaction about their experience as a major. The Exit Evaluation survey, which was first instituted in Fall 2005, also asked questions regarding their satisfaction with their psychology coursework at CSU.

Findings: Sixty-two graduating majors completed the Exit Evaluation survey in 2005-2006, and a hundred and seventy four completed the survey in 2006-2007. Students completed an average of 9.3 and 9.4 of the psychology courses at CSU, with an average overall GPA of 3.34 and 3.29, and psychology GPA of 3.49 and 3.44, respectively. Twenty two percent and 23% of them applied for a psychology related job, and 21% and 18% of them applied to graduate level programs, respectively. Approximately a third of those who applied for psychology related jobs, in both years, were hired, and 53% and 55% of those who applied to graduate training programs were accepted, respectively. Seventeen percent and 14% of the students, respectively, took the GRE, but only a few reported their scores. Only 8.4% and 7.1% of the students reported the coursework at CSU was not challenging, 8.4% and 9.1% reported that they were not satisfied with their experiences in the psychology undergraduate program at CSU, 5.6% and 6.3% reported that the faculty did not satisfy their educational

needs, and 7% and 11% would not recommend CSU for a psychology major to others, respectively. However, 79% of the 2005-2006 students and 85% of the 2006-2007 students reported being satisfied or extremely satisfied with their experience as a major.

Review: UPC has discussed implications of 2001-2002 survey results and Department faculty has been informed. The Exit Evaluation results will be discussed by the UPC in Fall 2007.

Action: The Exit Evaluation survey will continue in subsequent semesters.

Improvements: To be determined