

Department of Psychology, University of Iowa
Draft Outcomes Assessment Plan
Draft of 10/20/2006

INTRODUCTION

The Psychology Department's outcomes assessment plan has four components:

1. A statement of *intended learning outcomes* for the Psychology major.
2. A statement of how the curriculum for the major maps onto the intended learning outcomes.
3. A specification of measures and methods used to assess how the curriculum achieves the intended learning outcomes.
4. A specification of how (by whom) the data collection and analysis will be carried out.

1 & 2. STATEMENT OF INTENDED LEARNING OUTCOMES & MAPPING OF CURRICULUM ONTO OUTCOMES

The department intends its graduates to have achieved certain core competencies that in our opinion constitute the essence of sound psychological inquiry in all its forms. Achievement of these competencies constitutes the department's *intended learning outcomes* for the major, the first part of the outcomes assessment plan. Different elements of the curriculum serve these intended learning outcomes in different ways, and a statement of this mapping constitutes a second element of the overall outcomes assessment plan.

These two parts of the plan are shown together in **Table 1 (Overview: Mapping of Curriculum Onto Intended Learning Outcomes)**. The leftmost column of the Table lists the intended learning outcomes for the Psychology major. The remaining columns summarize how various curricular offerings are intended to serve these outcomes, and also indicate whether a course *Introduces*, *Extends*, or *Refines* knowledge that is relevant to the learning outcome.

3. ASSESSMENT METHODS

(I) Indirect measures: Senior Survey

Each semester, graduating students are mailed a survey to assess their experiences within the department and to track their future plans. Return rates for these surveys are between 25% and 40%. Based on this survey, at the end of each academic year the psychology department will compile student responses to survey questions about future plans and

calculate the percentage of responders who endorse each category. The proportion of graduating students planning to pursue a graduate career or non-graduate career related to psychology constitutes an indirect assessment of the department's effectiveness in preparing students for careers that build on our undergraduate program. Sample results (based on summer 2005 senior surveys) are shown below:

| Career plans for next year | Percent of Students |
|--|---------------------|
| Graduate school in Psychology | 20 |
| Graduate school in other field | 30 |
| Professional school | 10 |
| Total Graduate School | 60 |
| | |
| Work in job related to Psychology | 20 |
| Work in job unrelated to Psychology | 10 |
| Other | 10 |
| Undecided | 0 |

(II) Direct measures: Embedded Test Questions

Our major requires students to take the following set of courses:

- (A) An introductory-level course:
 - 1. 31:001 Elementary Psychology
- (B) Intermediate-level courses:
 - 2. A statistics course, taught outside the department
 - 3. Four out of five courses that focus on different areas of psychology (31:012, 31:103, 31:014, 31:015, 31:016)
 - 4. One or more Research Methods courses (31:043; or 31:120 and 31:121)
- (C) Upper-level courses:
 - 5. Three elective courses (31:100 and above).

(A) and (B) together constitute the “core courses” in the curriculum. For each of the core courses, and for selected upper-level courses, a set of test questions will be constructed by department faculty familiar with the pedagogy and content of the particular course. These questions will be designed to test achievement of the intended learning outcomes. Specific foci for these questions are shown, for each learning outcome, in the leftmost column of **Table 2 (Foci for Embedded Test Questions)**, which also provides further detail on the mapping between courses and intended learning outcomes. Questions will be designed so that answers can be evaluated unambiguously as “Correct” or “Incorrect”. It will be recommended that instructors of the core and selected upper-level courses

embed a selection of five to ten questions from the set of questions for that course into quizzes and/or exams, whenever teaching that course, with at least five of these questions appearing on quizzes/exams that are held in the latter half of the course.

Because the statistics courses are taught outside the department, it may not be logistically possible for test questions to be embedded in these classes. Instead, it will be recommended that instructors of the psychology research methods classes (which have statistics as a prerequisite) include embedded questions that gauge understanding of statistics in the early part of the research methods course.

At the end of each of the core and selected upper-level courses, instructors would report an outcome measure in something like the following format (the data are hypothetical):

| Intended learning outcome | Number of answers to questions | Percent correct answers (N) |
|---|---------------------------------------|------------------------------------|
| <i>Demonstrate knowledge of various major perspectives and theories of psychology.</i> | 360 | 79.17% (285) |
| <i>Demonstrate use of scientific method to examine psychological questions.</i> | 90 | 61.11% (55) |
| <i>Articulate or recognize the importance of values, ethical standards, and diversity in psychology</i> | 110 | 74.54% (82) |
| <i>Apply psychological knowledge to real world situations.</i> | 85 | 65.88% (56) |

These scores will be collated at the end of each academic year. For each intended learning outcome, the average score on that outcome, aggregated across all courses, will gauge how well that intended outcome is being served by the curriculum. A low aggregate score on a given outcome will suggest that it may be appropriate to re-evaluate how the curriculum attempts to meet that outcome.

4. DATA COLLECTION AND ANALYSIS

The DEO will assign a group of faculty members to manage the process of data collection and analysis, which includes:

- (i) collation of data from embedded test questions reported by instructors each semester (end of each semester)
- (ii) creation of summary statistics for each intended learning outcome (end of each academic year)

It is expected that the group membership will change from year to year.

TABLE 1: Overview (Mapping of Curriculum onto Intended Learning Outcomes)

| Intended Learning Outcomes for Psychology Majors at Iowa: | Courses in which opportunities for learning are offered | | |
|--|---|--|--|
| | Knowledge relevant to learning outcome is: | | |
| | <i>Introduced</i> | <i>Extended</i> | <i>Refined</i> |
| <i>Demonstrate knowledge of various major perspectives and theories of psychology.</i> | 31:001 | 31:012, 31:013, 31:014, 31:015, 31:016 | All 100-level courses except the Research Methods lecture courses (31:120, 31:043) |
| <i>Demonstrate use of scientific method to examine psychological questions.</i> | 31:001 | 31:012, 31:013, 31:014, 31:015, 31:016 | 31:043, 31:120, 31:121, 31:185, 31:188 All elective 100-level courses |
| <i>Articulate or recognize the importance of values, ethical standards, and diversity in psychology.</i> | 31:001 | 31:012, 31:013, 31:014, 31:015, 31:016 | 31:043, 31:120, 31:121, 31:185, 31:188 All elective 100-level courses |
| <i>Apply psychological knowledge to real world situations.</i> | 31:001 | 31:012, 31:013, 31:014, 31:015, 31:016, 31:043, 31:120, 31:185 | 31:121, 31:188 All 100-level courses except the Research Methods lecture courses (31:120, 31:043) |

TABLE 2: Foci for Embedded Test Questions

| Intended Learning Outcome | Course Number | | | | | | | | | |
|--|---------------|----------|----------|----------|----------|----------|----------|----------|-------------------|-----------|
| | 31:001 | 31:012 | 31:013 | 31:014 | 31:015 | 31:016 | Stats | 31:043 | 31:120, 31:121 | 100-level |
| I=Introduces, E=Extends, R=Refines | | | | | | | | | | |
| <i>Demonstrate knowledge of various major perspectives and theories of psychology.</i> | <i>I</i> | <i>E</i> | <i>E</i> | <i>E</i> | <i>E</i> | <i>E</i> | | | | <i>R</i> |
| <i>Embedded test questions assess:</i> -- understanding of key conceptual frameworks, perspectives, and theories -- knowledge of the breadth and content of the field | | | | | | | | | | |
| <i>Demonstrate use of scientific method to examine psychological questions.</i> | <i>I</i> | <i>E</i> | <i>E</i> | <i>E</i> | <i>E</i> | <i>E</i> | <i>E</i> | <i>R</i> | <i>R</i> | <i>R</i> |
| <i>Embedded test questions assess:</i> -- seeking to understand behavior by identifying controlled and uncontrolled variables, their effects on the behavior, and alternative explanations of the behavior -- demonstrating ability to interpret, analyze and evaluate data in psychology -- demonstrating knowledge of research methods in psychology -- development of skill sets for conducting literature searches and data collection | | | | | | | | | | |

| | | | | | | | | | | |
|---|----------|----------|----------|----------|----------|----------|--|----------|----------|----------|
| <i>Articulate or recognize the importance of values, ethical standards, and diversity in psychology.</i> | <i>I</i> | <i>E</i> | <i>E</i> | <i>E</i> | <i>E</i> | <i>E</i> | | <i>R</i> | <i>R</i> | <i>R</i> |
| <p><u><i>Embedded test questions assess:</i></u></p> <ul style="list-style-type: none"> -- demonstrated knowledge of ethical standards and practices in psychology -- articulation/recognition of the value of diversity in psychological inquiry, including diversity of methods and approaches; interdisciplinary approaches; diversity of populations and topics of inquiry; and diversity of human and non-human participants | | | | | | | | | | |
| <i>Apply psychological knowledge to real world situations.</i> | <i>I</i> | <i>E</i> | <i>E</i> | <i>E</i> | <i>E</i> | <i>E</i> | | <i>E</i> | <i>E</i> | <i>R</i> |
| <p><u><i>Embedded test questions assess:</i></u></p> <ul style="list-style-type: none"> -- utilization of scientific method and data evaluation in consideration of everyday situations | | | | | | | | | | |