Assessment Report Applied Psychology Program 2008-09

I. Introduction

History

The Department of Humanities and Social Sciences added the Bachelor of Science in Applied Psychology in 1997. The program has become well established and continues to grow and evolve. A minor in Psychology is also available to students. The Applied Psychology program serves students in the major, students in the minor, and serves General Education by providing courses that fulfill social science requirements.

Enrollment trends

Enrollment for the Applied Psychology major started very high, with 195 students enrolled in Fall of 2002. Enrollment has declined steadily each year, with 107 students enrolled in Fall 2008. The enrollment trend is not surprising as there was initially a backlog of individuals interested in the degree. Students in the program tend to be local; therefore it is not surprising that enrollment trends have dropped somewhat since the initial offering of the program. Enrollment may also be affected by the additions of the Communications and Biology majors to the OIT curriculum. It should also be noted that many students transfer into the program as juniors or seniors, having completed the general education requirements within another major or at another college (e.g., KCC). Graduation rates for this same period are somewhat more constant, with smaller fluctuations than fall term enrollment. This is most likely a reflection of the impact of students who transfer into the major as juniors or seniors.

Graduation rates

Graduation rates have remained steady since the inception of the program, averaging 47 graduates per year (54-44) over the past five years. (43 in 2008-2009)

II. Program Purpose, Objectives, and Student Learning Outcomes

Applied Psychology Program: Mission Statement

The mission of the Applied Psychology program is to enable students to apply general knowledge of psychology and in-depth knowledge and skill in specific areas of psychology to communicate effectively, think critically, behave ethically and with cultural awareness, and work interpersonally with people from a wide variety of backgrounds.

Applied Psychology Program: Objectives

- 1. To produce graduates with effective interpersonal skills that can work in a variety of practical settings
- 2. To enable students to obtain the knowledge and skills necessary for immediate employment and/or graduate study in psychology and related areas
- 3. To provide opportunities for students who wish to apply psychology training to employment in business and human service related organizations or to prepare for graduate programs in related areas
- 4. To serve as a minor to complement other programs on campus

Applied Psychology Program: Outcomes

- 1. Students will be able to demonstrate an understanding of the major theoretical approaches, findings, and trends in psychology
- 2. Students will demonstrate an understanding of and be able to use major research methodologies in psychology, including design, data analysis, and interpretation
- 3. Students will demonstrate an understanding of applications of psychology to personal, social, and organizational problems and issues

III. Three-year Cycle for Assessment of Program Learning Outcomes

The three learning outcomes will be assessed on a three-year cycle as demonstrated in Table 1.

Program Learning Outcomes	2007/08	2008/09	2009/10
1. Students will be able to demonstrate an understanding of the major theoretical approaches, findings, and trends in psychology.	X		
2. Students will demonstrate an understanding of and be able to use major research methodologies in psychology, including design, data analysis, and interpretation.		X	
3. Students will demonstrate an understanding of applications of psychology to personal, social, and organizational problems and issues.			X

IV. Summary of 2008-2009 Assessment Activities

The Applied Psychology faculty met 9/29/08. We agreed that we will continue to focus assessment efforts in the courses that make up the core of the Applied Psychology curriculum, including the required Emphasis Electives. The free elective psychology courses will not be included in our program assessment. Our decision is based on the following – those courses typically have lower enrollment so the samples would be small and not necessarily representative of the outcomes of the program as a whole.

Program Student Learning Outcome 2 is introduced in PSY 201 and is primarily addressed in PSY 313. Therefore assessment of this SLO will focus on these two courses. See Appendix A for Course X SLO matrix with 2008-09 target courses.

Program Outcome 2: Students will demonstrate an understanding of and be able to use major research methodologies in psychology, including design, data analysis, and interpretation.

Direct Assessment #1

The faculty assessed this outcome in PSY 201 in Fall 2008 (n = 135) using exam items. The exam items evaluated the proficiency of students using the performance criteria described in Table 2 below.

Performance Criteria Demonstrate understanding of Research Designs	Assessment Method Multiple choice exam questions	Measurement Scale # of correct answers out of 13	Minimum Acceptable Performance 70% at 9 or more correct	Results 58% at 9 or more correct*
Demonstrate understanding of Data Analysis and Interpretation	Multiple choice exam questions	% of correct Answers out of 5	70% at 4 or more correct	78% at 4 or more correct

Table 2 Assessment Results for SLO #2 in PSY 201, Fall 2008.

*70% at 8 or more correct

Strengths and Weaknesses

Students in the PSY 201 classes in Fall 2008 performed at acceptable levels on items assessing understanding on Data Analysis and Interpretation. Students performed at less than acceptable levels on items assessing understanding of Research Designs. However, the majority of students (70%) performed at just under the standard (i.e. at 61.5% rather than 70% correct) on those items. These data suggest that students have acquired some understanding of Research Methods at this introductory level.

Direct Assessments #2 and #3

The faculty assessed this outcome in PSY 313 in Fall 2008 and in Spring 2009 using final exam items. The exam items evaluated the proficiency of students using the performance criteria described in Table 3 below.

			Minimum		Results
Performance Criteria	Assessment	Measurement	Acceptable	Results	Spring
	Method	Scale	Performance	Fall 2008	2009
Demonstrate understanding	3 short	1-4 scale, %	70% at 3 or 4	77% at 3	10% at 3
of Research Designs	answer exam	at 3 or 4		or 4 on all	or 4 on all
	questions,			questions	questions
	Rubric				
Demonstrate understanding	Multiple	# of correct	70% at 14 or	38% at 14	25% at 14
of Research Designs	choice exam	answers out of	more correct	or more	or more
	questions	20		correct	correct
Demonstrate understanding	5 short answer	1-3 scale, %	70% at 2 or 3	50% at 2	10% at 2
of Data Analysis and	exam	at 2or 3	on all	or 3 on all	or 3 on all
Interpretation	questions,		questions	questions	questions
	Rubric				
Demonstrate understanding	Multiple	% of correct	70% at11 or	30% at 11	15% at 11
of Data Analysis and	choice exam	answers out of	more correct	or more	or more
Interpretation	questions	16		correct	correct

Table 3 Assessment Results for SLO #2 in PSY 313, Fall 2008

Strengths and Weaknesses

Students in the Fall 2008 section of PSY 313 class performed better on short answer items than on multiple choice items. This suggests that the format of the question may interact with the students' ability to demonstrate knowledge. In general students performed better on general questions about research designs. The class tends to focus more on the designs than data analysis, so this finding is not unexpected. A review of missed items suggests that the students were weakest with identifying strengths and weaknesses of research designs with regard to threats to internal and external validity. This material was covered at the end of the term and students may have been weaker due to less exposure to the material. The difference in performance between multiple choice and short answer items suggests that students may understand the broader concepts (as tested in the short answer items) but are weaker in terms of details (as tested by the multiple choice items). This discrepancy may be alleviated by providing additional study guide materials that emphasize the relevant details.

Fall 2008 students also performed poorly on the Data Analysis and Interpretation items. The majority of the information about data analysis and interpretation is covered via review of research articles, but statistical concepts were not included in a specific learning module in the course. A course in statistics is a prerequisite for PSY 313. Some students may not have taken the prerequisite course; others may not recall some of the relevant information. The data suggest that a module reviewing statistics should be incorporated in the course.

Students in the Spring 2009 section of PSY 313 performed worse than the fall section. Students continue to have difficulty with identifying threats to validity and with interpreting statistical analyses. Performance on items addressing issues of bias in research designs was acceptable. Performance on items that require identifying independent and dependent variables was mixed; students showed greater difficulty identifying variables in complex designs. Performance on items that involved identifying key characteristics of different research designs was also mixed. Spring student performance on essay items was not acceptable. Students had the most difficulty with items related to interpreting statistical analyses.

Indirect Assessment 1

The faculty indirectly assessed this outcome in the Senior Survey conducted at the end of the spring term. Graduating seniors were asked to 'indicate how well the psychology program is doing in meeting the following objectives: Understanding of and being able to use major research methodologies in psychology, including design, data analysis, and interpretation' using 4 point scale (Excellent, Good, Poor, Very Poor).

		Minimum	
Assessment	Measurement	Acceptable	
Method	Scale	Performance	Results
Senior Survey	4 point rating	80% rate at Good or	88% at Good
	scale	Excellent	or Excellent

Table 4: Indirect Assessment of PSLO 2, n=25

Strengths and Weaknesses

Graduating seniors indicate that the program has provided them with an understanding of research methodologies in psychology. These ratings appear to be high in relation to student performance in the PSY 313 course. The student ratings may be a reflection of experiences beyond the PSY 313 course or may indicate that students feel they have made progress in this area.

Detailed records of this assessment can be found in the department assessment coordinator's notebook.

V. Student Learning Improvement Plan

Applied Psychology Program Student Learning Objective 2: *Students will* demonstrate an understanding of and be able to use major research methodologies in psychology, including design, data analysis, and interpretation.

The results from this assessment indicate that students in the PSY 201 course are performing adequately in the area of data analysis and interpretation. However, these students are weak in the areas of understanding of research designs. Faculty in the Applied Psychology program will review the course content during the 2009/2010 academic year.

The results from the assessment in the two sections of PSY 313 are disappointing. These results suggest that students are not prepared for the statistics portion of the course. During the 2009/2010 academic year, students will not be allowed to take PSY 313 unless they have met the statistics prerequisite (or are concurrently enrolled in statistics). This emphasis on completion of statistics before taking research methods may lead to improved performance on items related to statistics.

Another factor that should be addressed is the content of the PSY 313 course. Currently, Applied Psychology majors are required to take only one research methods course, and the course covers a broad range of material in a short time. Students have made anecdotal comments that they would prefer to have the course taught across two terms. This may be an appropriate approach. Requiring two terms of research methods would allow for more comprehensive coverage of the research methodologies in psychology. The Applied Psychology faculty will address possible curricular changes during the 2009/2010 academic year.

The results of the 2008/2009 assessment also suggest that the Student Learning Objectives for the Applied Psychology program may be too broad. A careful review of SLOs is planned for fall of 2010.

Appendix A

Applied Psychology

Program Learning Outcomes x PSY Core Course/Emphasis Core Course Matrix for 2008/09 Assessment

Program Learning Outcome

Students will demonstrate an understanding of and be able to use major research methodologies in psychology, including design, data analysis, and interpretation.

	1 st year	2^{nd} year	3 rd year	4 th year
Fall	PSY 201 (i)	PSY 215	PSY 301	PSY 420
		PSY 220	PSY 313 (e)	PSY 421
			PSY 317	PSY 422
			PSY 334	PSY 423
			PSY 341	
			PSY 347	
			PSY 360	
			PSY 410	
Winter	PSY 202	PSY 216	PSY 311	PSY 420
			PSY 317	PSY 421
			PSY 330	PSY 422
			PSY 335 (r)	PSY 423
			PSY 342	
			PSY 347	
			PSY 361	
			PSY 410	
Spring	PSY 203	PSY 220	PSY 312 (r)	PSY 420
			PSY 313 (e)	PSY 421
			PSY 317	PSY 422
			PSY 331	PSY 423
			PSY 339	PSY 456
			PSY 347	PSY 480
			PSY 410	
			PSY 416	