Campus Correspondence

Southeastern Louisiana University

To: Faculty

Department of Psychology

From: Major Field Assessment in Psychology Committee

Earl W. Capron, Chair Euro Jay Azorlosa, member

Hunter McAllister, member

Re: Assessment/Evaluation of MFA efforts from Fall, 1992 to

Spring, 1994

Please find below a summary of the Assessment/Evaluation program currently underway in the Department of psychology:

I. Degree Program: B. A. PSYCHOLOGY

I. B.A. Psychology

1. Goal A

Provide students with a broad body of knowledge representative of the current state of knowledge in psychology.

a. Method of Assessment

SLU graduating psychology majors will have an average total score on the ETS Major Field Achievement Test in Psychology which meets or exceeds the 50th percentile rank on a national sample of schools. ETS provides not only a total scale score, but two subscores and several "assessment indicators" so that relative strengths and weaknesses of a program can be evaluated. It is expected that SLU graduating psychology majors will meet or exceed the 50th percentile in each of the following two subtests: Experimental psychology and Social psychology. In addition, it is expected that SLU graduating psychology majors meet or exceed the 50th percentile on each of the following "assessment indicators": Learning, Cognition & Perception; Sensory & Physiological; Developmental; Clinical, Abnormal & Personality; Social; and Measurement & Methodology. The area of Ethology & Comparative Psychology is omitted because we do not currently offer a course in this area.

b. Results Obtained

(1) TABLE 1 -- ETS Exam Results (Fall, 1992 to Spring, 1994): see Appendix I

In summary of the ETS data (Appendix I), it must be emphasized that the percentile rankings for the various Total scores and the two Subscores are based on a table of distributions of <u>individual students</u>' scores, whereas the percentiles for the various Assessment Indicators are based on a table of distributions of <u>Institutions</u>' scores. Also, mean scores falling between percentile intervals are reported in terms of their approximate percentile rank.

SLU Total scores fell at or above the 50th percentile in all cases, which meets Departmental goals. The Experimental subscores exceeded by a considerable degree the 50th percentile in all cases except for Fall, 1992 in which the score was slightly below the 50th percentile. In general the Department is meeting its goal in this area, particularly in recent years. The Social subscores were above the 50th percentile in the 92/93 academic

year but very slightly below the 50th percentile in the 93/94 academic year. Such minor fluctuations are to be expected when small numbers of students are being tested each semester. Overall, the Department is probably meeting this goal. Regarding the various "Assessment indicators", the Department met or exceeded its goal (50th percentile) for all four semesters tested in the following three areas: Sensory & Physiological; Social; and Clinical, Abnormal & Personality. The Department met or exceeded its goal in three out of the four semesters in the area of Learning, Cognition & Perception. Even though this area is not one of the Department's goals, students scored at or above the 50th percentile in two out of the four semesters in the area of Ethology & Comparative. The Department met or exceeded its goal in one of the four semesters tested in the following areas: Developmental; and Measurement & Methodology. From the "Assessment indicator" data, in general, currently the Department's relative strengths are in the two areas of: Sensory & Physiology; and Learning, Cognition & Perception. Relative weaknesses are currently in the two areas of: Developmental; and Measurement & Methodology.

(2) TABLE 2 -- Psych 333/334 Questionnaire Results: see Appendix II

Although not specifically mentioned as a "Method of Assessment", the results of the Psych 333/334 Questionnaire with regard to Goal "A" is clearly relevant and important here, and thus is included. The Department was rated positively (i.e. above "3.0") in terms of success in meeting this goal for both academic years covered, and rated this goal as being more important now than when they took their first psychology course.

c. Changes in Program

Course content in two courses, Principles of Research Design and Developmental Psychology have been modified as a result of data generated. Principles of Research Design will place more emphasis on measurement concepts (e.g. reliability and validity).

d. Planned Changes

Ongoing modification of curriculum and course content as necessary.

2. Goal B

Foster students' grasp and appreciation of the scientific method in psychology.

a. Method of Assessment

All psychology majors are required to take Psychology 220 (Principles of Research Design, and either Psychology 333 (Experimental Research in Psychology) or Psychology 334 (Applied Research Design and Analysis) in which all of these skills are emphasized. Passing Psychology 333 or 334 requires the student to have written a manuscript from beginning to end in which the student must be able to conceptualize the targeted phenomenon into scientific research terms, and generate one or more testable hypotheses. Graduating psychology majors will take the ETS Major Field Achievement Test in Psychology and meet or exceed the 50th percentile in the Experimental psychology subtest and on the Measurement and Methodology "assessment indicator".

b. Results Obtained

(1) Results of ETS (Appendix I and summary in section 1b) indicate that the Department has met

or exceeded its goal as follows:

- (a) Total ETS score -- every tested semester
- (b) Experimental subscore -- three of the four tested semesters
- (c) Measurement & Methodology Assessment Indicator -- one out of the four tested semesters

(2) Although not specifically mentioned as a "Method of Assessment", the results of the Psych 333/334 Questionnaire with regard to Goal "B" is clearly relevant and important here, and thus is included. The Department was rated positively (i.e. above "3.0") in terms of success in meeting this goal for both academic years covered, and rated this goal as being more important now than when they took their first psychology course.

Additional Questionnaire results (Appendix II) indicate that over 50% of students felt competent to perform all of the listed skills with only minimal supervision except for advanced statistics. More specifically, with regard to Question #27: 80% to 100% of the students rated themselves competent, with only minimal supervision, to do every skill listed except that 60% & 74% felt competent to graph data, 60% & 70% felt competent to write a results section, 72% & 57% felt competent to perform simple statistics (e.g. t-tests) and 48% & 44% felt competent to use more advanced statistics (e.g. ANOVA) to analyze data. In addition, only 76% of the 92/93 students felt competent to write a discussion section.

c. Changes in Program

Course content in Principles of Research Design has been modified as a result of data generated to place more emphasis on measurement concepts (e.g. reliability and validity).

d. Planned Changes

Ongoing modification of course content and curriculum as necessary.

3. Goal C

To train students in practical research skills.

a. Method of Assessment

All psychology majors are required to take Psychology 220 (Principles of Research Design), Psychology 221 (Psychological Statistics), Psychology 222 (Psychological Statistics Laboratory), and either 333 (Experimental Research in Psychology) or Psychology 334 (Applied Research Design and Analysis) in which these skills are emphasized. Psychology majors are required to be able to apply the entire scientific method to actual research questions. Thus, passing Psychology 333 or 334 requires the student to have written a manuscript from beginning to end.

SLU graduating psychology majors will take the ETS Major Field Achievement Test in Psychology and meet or exceed the 50th percentile in the Experimental psychology subtest and on the Measurement and Methodology "assessment indicator".

b. Results Obtained

(1) Results of ETS (Appendix I and summary in section 1b) indicate that the Department has met or exceeded its goal as follows:

- (a) Total ETS score -- every tested semester
- (b) Experimental subscore -- three of the four tested semesters
- (c) Measurement & Methodology Assessment Indicator -- one out of the four tested semesters
- (2) Questionnaire results (Appendix II and summary in section 2b) indicate that over 50% of students felt competent to perform all of the listed skills with only minimal supervision except for advanced statistics. Although not specifically mentioned as a "Method of Assessment", the results of the Psych 333/334 Questionnaire with regard to Goal "C" is clearly relevant and important here, and thus is included. The Department was rated positively (i.e. above "3.0") in terms of success in meeting this goal for both academic years covered, and rated this goal as being more important now than when they took their first psychology course.

c. Changes in Program

Course content for Principles of Research Design has been modified to place more emphasis on measurement concepts (e.g. reliability and validity). Making Principles of Research Design a prerequisite for Psychological Statistics, in order to provide a context which makes discussion of statistical concepts meaningful.

d. Planned Changes

Ongoing modification of course content and curriculum as necessary.

4. Goal D

To develop students' skill in Critical Thinking.

a. Graduates will be able to critique a methodologically simple published experiment, be able to point out any obvious methodological errors, and offer reasonable suggestions for their correction in a follow-up experiment. The level of experimental sophistication will compare favorably with those students graduating from a national sample of psychology programs.

All psychology majors are required to take Psychology 220 (Principles of Research Design), and either Psychology 333 (Experimental Research in Psychology) or Psychology 334 (Applied Research Design and Analysis) in which all of these skills are emphasized. Passing Psychology 333 or 334 requires the student to have written a manuscript from beginning to end in which the student to be able to: critique a methodologically simple published experiment, be able to point out any obvious methodological errors, and offer reasonable suggestions for their correction in a follow-up experiment.

SLU graduating psychology majors will take the ETS Major Field Achievement Test in Psychology and meet or exceed the 50th percentile in the Experimental psychology subtest and on the Measurement and Methodology "assessment indicator".

b. Results Obtained

(1) Questionnaire results (Appendix II and summary in section 2b) indicate that over 50% of students felt competent to perform all of the listed skills with only minimal supervision except for advanced statistics. Although not specifically mentioned as a "Method of Assessment", the results of the Psych 333/334 Questionnaire with regard to Goal "D" is clearly relevant and important here, and thus is included. The

Department was rated positively (i.e. above "3.0") in terms of success in meeting this goal for both academic years covered, and rated this goal as being more important now than when they took their first psychology course.

- (2) Results of ETS (Appendix I and summary in section 1b) indicate that the Department has met or exceeded its goal as follows:
 - (a) Experimental subscore -- three of the four tested semesters
 - (b) Measurement & Methodology Assessment Indicator -- one out of the four tested semesters

c. Changes in Program

Additional data is reviewed as it becomes available; results are discussed at faculty meetings and implementations for curriculum are considered. For example, content of Principles of Research Design has been modified to place more emphasis on measurement concepts (e.g. reliability and validity).

5. Goal E

To prepare qualified students for graduate school in Behavioral Sciences.

a. Method of Assessment

The rate of admittance into graduate schools in the behavioral sciences will compare favorably with other students graduating from a national sample of psychology programs in institutions comparable to SLU, and who apply for graduate work in the field. Once in a graduate program, the level of academic performance will compare favorably with other students graduating from other undergraduate institutions comparable to SLU.

SLU graduating psychology majors will have an average Total score on the ETS Major Field Achievement Test in Psychology which meets or exceeds the 50th percentile rank on a national sample of schools.

Psychology 333/334 students administered the "Students' Attitudes Towards Psychology" questionnaire will have positive scores (i.e. an average score of above "3.0") on those items in which they rate their current opinion of their degree of preparedness, and will rate this goal as being more important now than it was when they first entered the program on those items allowing such a comparison. In addition, there is an open-ended question by which students can express any opinion relevant to this goal.

Alumni respondents will have positive ratings (i.e. an average score of above "3.0") in terms of the department's success in having achieved Goal E. In addition, at least 25% of respondents will indicate that they are currently pursuing an advanced degree in the Behavioral Sciences.

b. Results Obtained

- (1) Results of ETS (Appendix I and summary in section 1b) indicate that the Department has met or exceeded its goal regarding the <u>Total</u> ETS score on every tested semester.
- (2) Questionnaire results (Appendix II) indicate that, in all cases, students rated the Department favorably (i.e. above "3.0") with respect to success in meeting this goal, and rated this goal as being more important now than when they took their first psychology course. In addition, over 75% indicate that they are either "likely" or "very likely" to apply to graduate school.

c. Changes in Program

No specific changes have been made to program.

d. Planned Changes

Ongoing modification of course content and curriculum as necessary.

Goal F

To stimulate students' interest in the study of psychology.

a. Graduates in Psychology will compare favorably in their interest level and motivation to pursue an advanced degree in the behavioral sciences with students in other undergraduate programs.

Psychology 333/334 students administered the "Students' Attitudes Towards Psychology" questionnaire will have positive scores (i.e. an average score of above "3.0") on those items in which they rate their current interest in psychology, and will rate this goal as being more important now than when they first entered the program on those items allowing such a comparison. In addition, there is an open-ended question by which students can express any opinion relevant to this goal.

b. Results Obtained

- (1) Questionnaire results (Appendix II) indicate that:
- (a) In all cases, over 75% indicate that they are either "likely" or "very likely" to apply to graduate school.
- (b) In all cases, students rated the Department favorably (i.e. above "3.0") with respect to success in meeting this goal, and rated this goal as being more important now than when they took their first psychology course.

c. Changes in Program

No specific changes have been made to program.

d. Planned Changes

Results will be monitored and changes in course content and curriculum made as necessary.

APPENDIX I

TABLE 1 -- ETS Exam Results (Fall, 1992 to Spring, 1994):

		Spring	Fall	Sprii	•
	1992	1993	1993	19	994
Sample N	12	13	12	1	4
Sample Means[National Percentile	Rank for Individua	1 Students'	Test Scores	a ^a]	
Total Test	160.7[51st]	-	h] 160.	3[50th]	164.1[60th]
(National Total Test Mean for Indi	vidual Students = :				
Subscore 1/Experimental	58.3[47t		-	65.3[64th]	69.1[76th]
(National Total Subscore Mean for	Individual Student	$s = 59.6^{\circ}$)		
Subscore 2/Social	62.0[54tl	i] 63.5[59th] :	57.8[40th]	60.6[49th]
(National Total Subscore Mean for	Individual Student	$s = 60.2^{s}$)		
Assessment Indicator[Institutional	National Percentile	Rank ^a]			
(Institutional National Mean % C	orrect ^a)				
Learning, Cognition,	51.5[47	h] 55.8[71st] 5	6.8[76th]	61.3[92nd]
& Perception	(50.7)	(50.7) (:	50.7)	(50.7)
Sensory &	53.7[57	th] 61.6[87th]	61.8[87th]	64.2[92nd]
Physiological	(50.7)	(50.	7)	(50.7)	(50.7)
Developmental	53.3[54	th] 51.2	[41st]	44.6[15th]	49.3[30th]
1	(52.0)	(52.0)	(52	2.0)	(52.0)
Clinical, Abnormal,	64.3[74	th] 64.7		60.8[53rd]	60.6[51st]
& Personality	(58.9)	(58.9		58.9)	(58.9)
Social	56.3[50	h] 62.6[78th]	59.0[62nd]	62.1[77th]
	(55.8)	(55.8)	-	5.8)	(55.8)
Measurement &	45.1[30			41.8[19th]	48.1[42nd]
Methodology	(49.1)	(49.1) (4	49.1)	(49.1)

Note: Percentiles of decimal numbers are approximated ^a = = 1990-1993 national data

APPENDIX II

TABLE 2 -- Psych 333/334 Questionnaire Results:

Scale: 1 extremely unimportant - 5 extremely important (or extremely unsuccessful - extremely successful)

Goal A: Provide students with a broad body of knowledge representative of the current state of knowledge in psychology.

Spring 93 ^{a,b} Spring	
Spring 33 Spring	
$(n=25) \qquad (n=2)$:4)
First day of Psych $101 = = 3.68$ 3.63	
Present view $=$ 4.20 4.13	
Success of Department $=$ 3.88 4.25	

Goal B: Foster students' grasp and appreciation of the scientific method in psychology.

```
First day of Psych 101 = 2.96 3.21

Present view = 4.16 4.50

Success of Department = 3.84 4.13
```

Goal C: To train students in practical research skills.

First day of Psych
$$101 = =$$
 2.36 2.50
Present view = = 3.96 4.21
Success of Department = 3.88 3.83

Goal D: To develop students' skill in Critical Thinking.

```
First day of Psych 101 = = 2.84 2.75

Present view = 4.00 3.92

Success of Department = 3.40 3.75
```

Goal E: To prepare qualified students for graduate school in Behavioral Sciences.

First day of Psych $101 = =$	2.60	2.58
Present view $==$	4.28	4.17
Success of Department ==	3.52	3.88

Goal F: To stimulate students' interest in the study of psychology.

First day of Psych $101 = =$	3.68	3.33
Present view $==$	4.08	3.79
Success of Department ==	3.36	3.71

APPENDIX II (cont.)

Question #27: Per cent of students who feel that he/she can do the following with minimal supervision.

	Fall 92 &	Fall 93 &
	Spring 93	Spring 94°
a. Run subjects ==	96%	100%
b. Collect data ==	84%	95.7%
c. Do background research ==	88%	100%
d. Formulate a set of hypotheses ==	84%	82.6%
e. Write an introduction ==	96%	91.3%
f. Write a methods section ==	88%	95.7%
g. Graph data $==$	60%	73.9%
h. Use simple statistics (e.g. t-test) ==	72 %	56.5%
i. Use advanced statistics (e.g. ANOVA) ==	48%	43.5%
j. Write results section ==	60%	69.6%
k. Write discussion ==	76%	91.3%

Per cent of students who answered either "likely" or "extremely likely" about applying to graduate school ==

76% 84.6%.

Open-ended question -- Comments relevant to MFA:

- a. Fall 92/Spring 93: 11 out of 24 made comments. There were significant dissatisfaction about advising, especially concerning when courses were being offered, information about graduate school and careers in Psychology.
 - b. Fall 93/Spring 94: No comments were made about advising.

^a The Fall 92/Spring 93 data were collected in about the 12th week of classes, the Fall 93/Spring 94 data were collected in the last week of classes. Thus, students were further advanced in the course and therefore naturally felt more prepared than did the 92/93 students. Hence, differences between students across academic years will not be emphasized in this Report's summary.

^b The goal "To maintain high academic standards" was measured in 92/93 academic year but discontinued as a MFA goal, hence its data is not presented in this report.

[°] Only 23 out of the 24 students responded to this question.