### The Department of Mathematics Assessment Committee 2003-04 Report

Assessment Committee members Chris Devillier, Melinda Holt, Rebecca Muller and David Gurney reviewed the available data to see how well the department was meeting its goals as reflected in the Goal Attainment Frameworks for Mathematics Majors and Mathematics Education Majors on pages three and four of this report.

For **Mathematics Majors**, the results and recommendations were as follows.

50% of Mathematics Majors scored above the 40<sup>th</sup> percentile on the Major Field Achievement Test and the expected value was 80%. A couple years ago, the assessment committee had an opportunity to look at the questions on the Major Field Assessment Test and decided at that time that the questions were more conceptual and "big picture" than strictly skill-based. We suggested back then that instructors in upper level math courses use more conceptual questions in their exams. While this suggestion may not have had an impact yet on the Major Field Assessment scores, stronger promotion of the use of conceptual questions on course exams seems like a good idea.

100% of graduates were satisfied with their mathematics instruction as indicated by item #7 of the SLU Exit Survey and the expected value was 90%. The value was greater than expected, and the committee hopes the trend continues.

80% of graduates were comfortable asking for letters of recommendation from at least three faculty members as evidenced by item 37 in the SLU Exit Survey. This was less than the expected value of 100% but an increase over the value from the previous report. The committee suggests that faculty members add a note in their syllabi encouraging students to ask for letters of recommendations, and that advisors should tell their advisees to consider asking their mathematics instructors for letters of recommendation.

40% of graduates felt they were given opportunities and support for attending professional meetings as evidenced by item 38 in the SLU Exit Survey. This was far below the expected value of 80%, but above the value from the previous report. The committee suggested developing a flyer for our majors detailing the opportunities for traveling to meetings, funded research, presenting papers or participating in mathematics competitions. The department should also encourage more professors to invite students to apply for OSCAR grants.

We have no information on the percent of graduates who have career employment or are in graduate school because the Department of Mathematics never sent out a Post-Exit Survey. For **Mathematics Education Majors**, the results and recommendations were as follows.

37.5% of Mathematics Majors scored above the 40<sup>th</sup> percentile on the Major Field Achievement Test and the expected value was 80%. A couple years ago, the assessment committee had an opportunity to look at the questions on the Major Field Assessment Test and decided at the time that the questions were more conceptual and "big picture" than strictly skill-based. We suggested back then that instructors in upper level math courses use more conceptual questions in their exams. While this suggestion may not have had an impact yet on the Major Field Assessment scores, stronger promotion of the use of conceptual questions on course exams seems like a good idea.

100% of graduates were satisfied with their mathematics instruction as indicated by item #7 of the SLU Exit Survey and the expected value was 90%. This outcome was higher than expected and the committee hopes that the trend continues.

100% of our Mathematics Majors passed the Mathematics portion of the Praxis Exam between September 2002 and August 2003. While this is the expected value, we should be receiving the Praxis Exam results on a more regular basis.

100% of graduates were comfortable asking for letters of recommendation from faculty members as evidenced by item 37 in the SLU Exit Survey. This was the expected value, and the committee hopes that the trend continues.

100% of graduates felt they were given opportunities and support for attending professional meetings as evidenced by item 38 in the SLU Exit Survey, and this was above the expected value of 80%. Again the committee thinks this is a good sign and hopes the trend continues.

As noted previously, we have no information on the percent of graduates who have career employment or are in graduate school because the Department of Mathematics never sent out a Post-Exit Survey.

As a **Final Note** to this report, Assessment Committee members Rebecca Muller and David Gurney have committed to attending a three-year, three-part Mathematical Association of America Supporting Assessment in Undergraduate Mathematics (SAUM) workshop. The benefit to the department should be a revised assessment that will give faculty more useful information about how the department is doing and, as a result, build faculty support for the assessment process.

### GOAL ATTAINMENT FRAMEWORK

# B.S., Mathematics Department of Mathematics

Academic Year 2003-04

July 21, 2004

Expected Outcome	Much Less than Expected	Less than Expected	Expected	More than Expected	Much More than Expected
% of graduates scoring above the 40th percentile on the ETS Major Field Achievement Test in Mathematics	2003 50%		80%		
% of graduates satisfied with their mathematics instruction, as indicated on the SLU Exit Survey. (Item #7)			90%	01-02 100%	
% of graduates who feel comfortable asking for letters of recommendation from at least three professors in the Mathematics Department as evidenced by the SLU Exit Survey. (Item #37)		01-02 80%	100%		
% of graduates who feel they were given opportunities and support for attending professional mathematics meetings while a student at SLU as evidenced by the SLU Exit Survey. (Item #38)	01-02 40%		80%		
% of graduates who have career employment or will be enrolled in graduate school as evidence by the SLU Mathematics Post Exit Survey.			60% Survey not given		

### GOAL ATTAINMENT FRAMEWORK

## B.S., Mathematics Education Department of Mathematics

Academic Year 2003-04

July 21, 2004

	Much Less	Less		More	Much
	than	than		than	More than
Expected Outcome	Expected	Expected	Expected	Expected	Expected
% of graduates scoring above the 40th	2003				
percentile on the ETS Major Field	37.5%		80%		
Achievement Test in Mathematics					
% of graduates satisfied with their				01-02	
mathematics instruction, as indicated on the			90%	100%	
SLU Exit Survey. (Item #7)					
% of graduates who pass the National			02-03		
Teachers Exam			100%		
% of graduates who feel comfortable asking			01-02		
for letters of recommendation from at least			100%		
three professors in the Mathematics					
Department as evidenced by the SLU Exit					
Survey. (Item #37)					
% of graduates who feel they were given					01-02
opportunities and support for attending			80%		100%
professional mathematics meetings while a					
student at SLU as evidenced by the SLU					
Exit Survey. (Item #38)					
% of graduates who have career					
employment or will be enrolled in graduate			60%		
school as evidence by the SLU			Survey		
Mathematics Post Exit Survey.			not given		