

# General Education Assessment Report General Education Committee, April 2007

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## Background

The encompassing purpose of General Education is to pursue, and assure, the development and maturation of each student across a spectrum of knowledge that provides a common foundation for a lifetime of individual growth with an enhanced civic perspective. General Education enhances developments in all career specialties and academic majors and its foundation is critical to the pursuit of the highest order priority in the Indiana University Southeast Strategic Plan of 2005–2009: *providing students with the highest caliber educational experience possible*. The Senate has charged the General Education Committee with the responsibility to pursue related initiatives of the Strategic Plan:

*Initiative 1.1.1: With faculty support and endorsement, IUS will complete its revision of the general education curriculum and will integrate it across undergraduate degree programs.*

*Initiative 1.1.2: IUS will identify critical assessment areas in the general education curriculum, such as writing, and implement appropriate assessment programs to ensure quality foundation studies for all students.*

*Initiative 1.1.3: IUS will put into place a process for periodic, systematic review of general education, taking into account the results of assessment, noted in 1.1.2, as well as information about best practices in general education in higher education.*

## General Education Requirements

Details of Goals and Goal Outcomes of the General Education requirements can be found at the IUS website ([www.ius.edu/generaleducation/](http://www.ius.edu/generaleducation/)), which links to sections on (a) Purpose, Philosophy, and Goals, (b) General Education Student Learning Outcomes, (c) General Education Outcomes, and (d) Approved General Education courses.

Students who matriculate in the period from the fall of 2005 to the fall of 2007 are required to satisfy the General Education requirements listed in 2005–2007 Bulletin. Students who matriculate in a later period must satisfy the simplified requirements that were approved by the Senate in April of 2006 and will appear in the 2007–2009 Bulletin.

Students of the earlier matriculation period may take the option of satisfying the requirements that will appear in the 2007–2009 Bulletin but their academic counselor must document the choice. The following table summarizes the requirements of the General Education Goals.

<b>General Education Goal</b>	<b>Requirement</b>
Written Communication	ENG-W 131 or Hon-H 103
Oral Communication	SPCH-S 121 or Hon-H 104
Quantitative Reasoning	1 course from a list
Reasoning about Ethical Questions	1 course from a list
Critical Thinking	1 course from a list
Diversity	1 course from a list
CIIMI* in Arts and Humanities	2 courses in different disciplines (one in each area)
CIIMI in Natural and Physical Sciences	2 courses in different disciplines (one in each area); one course must include a lab
CIIMI in Social and Behavioral Sciences	2 courses in different disciplines (one in each area)
Information Technology Fluency	Major program is responsible for the goal.
Information Literacy	Introduced in First Year Seminar class and elaborated upon in a minimum of 2 courses of the major program.
*CIIMI = Central Issues, Ideas, and Methods of Inquiry	

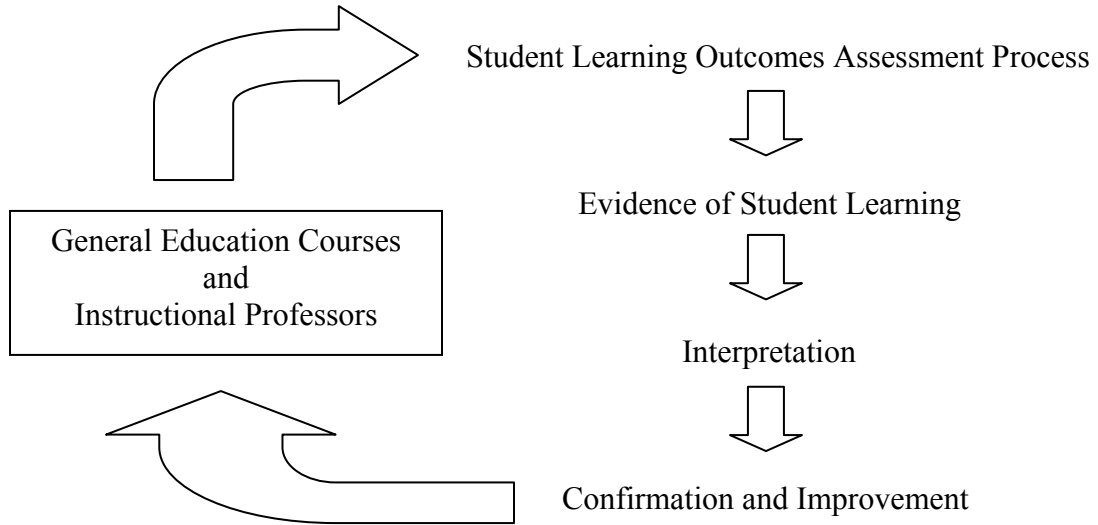
Most of the General Education goals are satisfied with course work approved by the General Education Committee. Application forms for approval of a General Education courses are available from the Chair of the General Education Committee. The Committee does not sanction courses for either the Information Technology Fluency goal or the Information Literacy goal. Faculty embed the outcomes of these goals into each program major and the faculty must describe and assess outcomes for these goals within both Curriculum Maps and annual program assessment reports to the Office on Institutional Research and Assessment starting with the fall 2008 report. The first installment of Curriculum Maps was due at the Vice Chancellor for Academic Affairs office on December 1, 2006.

### **Goal Assessment Structure and Schedule**

Institutional assessment of General Education outcomes provides a third layer of assessment. In addition to the instructor and program layer of assessment, General Education outcomes assessment provides course instructors with additional information to aid the task of finding ways to *improve student learning, which is the effective improvement of goal outcomes, an improvement in knowledge and cognitive skills.*

In other words, student learning is assessed in meaningful, useful, and workable ways to evaluate how outcomes are being achieved and to act on the results in ways that advance student learning and improve educational quality. Effective assessment of student learning is a matter of commitment, not a matter of compliance. As shown in the following figure, it also has a “closed loop” characteristic. The assessment process gives evidence of learning, which, when carefully analyzed, suggests pathways to improved

learning outcomes. The resulting outcomes are assessed and the process is continually repeated. This results in a never-ending culture of learning and assessment.



In consideration for the difficulty of the assessment task, the General Education Committee has chosen the cyclic three-year assessment schedule summarized in the following table.

<b>Assessment Period</b>	<b>Goals to be Assessed</b>
2006-7	Quantitative Reasoning Oral Communication Written Communication
2007-8	Diversity Ethical Reasoning Critical Thinking Information Literacy
2008-9	Central Ideas and Issues in Arts and Humanities Central Ideas and Issues in Social and Behavioral Sciences Central Ideas and Issues in Natural/Physical Sciences

Three committees have been established to assess the three General Education goals of the 2006-7 assessment period.

The General Education Committee invited Diane Reid, Coordinator of Basic Courses in Speech, to chair the ad hoc oral communication assessment committee. She graciously accepted the invitation and filled-out committee membership with volunteer colleagues who have teaching responsibilities related to the oral communication goal. Nancy Totten,

a General Education Committee member, volunteered to be a liaison member of the assessment group.

Phillip Miller, Coordinator for Lower Level Math, graciously accepted the invitation to chair the ad hoc quantitative reasoning assessment committee. He also filled-out committee membership with volunteer colleagues who have teaching responsibilities related to the quantitative reason. Walter Ryan and Alan Wong, both members of the General Education Committee, volunteered to be liaison members of the assessment group.

The Improvement of Writing Committee, chaired by Robert Lennartz, agreed to do the written communication assessment. Tom O’Neal, a General Education Committee member, volunteered to be liaison between the committees.

Larry Miles and Mary Anne Baker of the Institutional Research and Assessment Office volunteered to attend meetings, and advise all three General Education assessment groups upon invitation of the group chair.

Assessment project monies were available to all assessment committees directly through the Office of Vice-Chancellor of Academic Affairs.

### **Student Statistics**

By including several categories of publicly available student statistics in this report, we hope that course instructors will glean a little additional insight into student characteristics. This may be helpful during the effort to design strategies to enhance student learning. Matriculation SAT and ACT average scores are included along with the number of yearly transfer students, the mode of entry, and weekly workloads at external jobs. Several statistical tables on presented on the next page and the information may be confirmed and expanded upon using links at the IU President’s website.

- The average SAT scores of the 2005 beginning IUS cohort are 482 Verbal and 474 Math. The national average SAT scores for 2005 are 508 Verbal and 520 Math. The average ACT scores of the 2005 beginning cohort are 20 English and 19 Math. The Indiana average ACT score for 2005 are 21.2 English and 21.5 Math; national averages are 20.4 English and 20.7 Math.

- 761 transfer students were admitted to IUS during the 2006 calendar year. This is 41% of all new students. 12.5% transferred from Ivy

Mode of Entry of New IUS Students Calendar Year 2006 (Spring, Summer, and Fall)			
Fall First-Time Full-Time Students	All Other First-Time Students	Intercampus Transfers	External Transfers
40 %	11%	7 %	41 %

Tech and 66.2 % transferred from out-of-state. This is significant for any General Education assessment process because it means that assessment may not always reflect the learning outcomes of IUS General Education courses. Rather, assessment certainly

has a component that reflects learning, or lack thereof, at another institution. It has not been possible to separate these components in this year's assessment process.

- Jobs and their associated workloads have a very significant effect upon student learning and efforts of improve student learning. The IUS Spring 2006 Continuing Student Survey (991 responses) found that 84.4% of students work. Of those who work 5.8 % work 1-10 hr/wk, 21.5 % work 11-20 hr/wk, 31.2 % work 21-30 hr/wk, and 41.4 % work 31 or more hr/wk. Add travel time and you have a serious reduction in available study time. Furthermore, word-of-mouth information indicates that there may be a significant number of students who enroll in a greater number of credit hours than that which, given their workload, is advisable. They do this to maintain the minimum number of credit hours needed for scholarships and to qualify for financial aid.

### Test and Rank Profile IUS Beginners

Fall 2005

Fall 2006

By SAT Scores		
Percent Submitting SAT Scores		73.6%
Verbal		
Average	482	
25th Percentile	430	
75th Percentile	540	
Math		
Average	474	
25th Percentile	430	
75th Percentile	530	
By ACT Scores		
Percent Submitting ACT Scores		29.3%
English		
Average	20	
25th Percentile	16	
75th Percentile	22	
Math		
Average	19	
25th Percentile	16	
75th Percentile	22	
By High School Rank		
Top 10%	7.8%	
Top 25%	28.3%	
Top Half	67.9%	
Bottom Half	32.1%	

By SAT Scores		
Percent Submitting SAT Scores		72.7%
Verbal		
Average	473	
25th Percentile	410	
75th Percentile	530	
Math		
Average	471	
25th Percentile	420	
75th Percentile	520	
By ACT Scores		
Percent Submitting ACT Scores		27.1%
English		
Average	19	
25th Percentile	15	
75th Percentile	23	
Math		
Average	19	
25th Percentile	16	
75th Percentile	23	
By High School Rank		
Top 10%	9.9%	
Top 25%	29.2%	
Top Half	68.9%	
Bottom Half	31.1%	

Transfers to IUS  
Calendar Year 2006 (Spring, Summer, and Fall)

Transfer Inst	IUS Count	As % of IUSI Total
Ivy Tech	95	12.5%
Vincennes	19	2.5%
Ball State	13	1.7%
Indiana State	10	1.3%
Purdue	17	2.2%
USI	27	3.5%
IN-Private	22	2.9%
Out-of-State	504	66.2%
Foreign	6	0.8%
Other	48	6.3%
<b>Total</b>	<b>761</b>	<b>100.0%</b>

## Quantitative Reasoning Assessment Summary

The General Education goal of quantitative reasoning has the following student learning outcomes:

- A. Interpret mathematical models such as formulas, graphs, tables, and schematics and draw inferences from them.
- B. Represent mathematical information symbolically, visually, numerically, and verbally.
- C. Use a variety of mathematical methods (algebraic, geometric and/or statistical methods) to solve problems.

Assessment data have been collected for Outcomes A and B and the quantitative reasoning assessment group will begin collecting data for Outcome C during the Fall 2007 semester. The following General Education approved courses are included in this report:

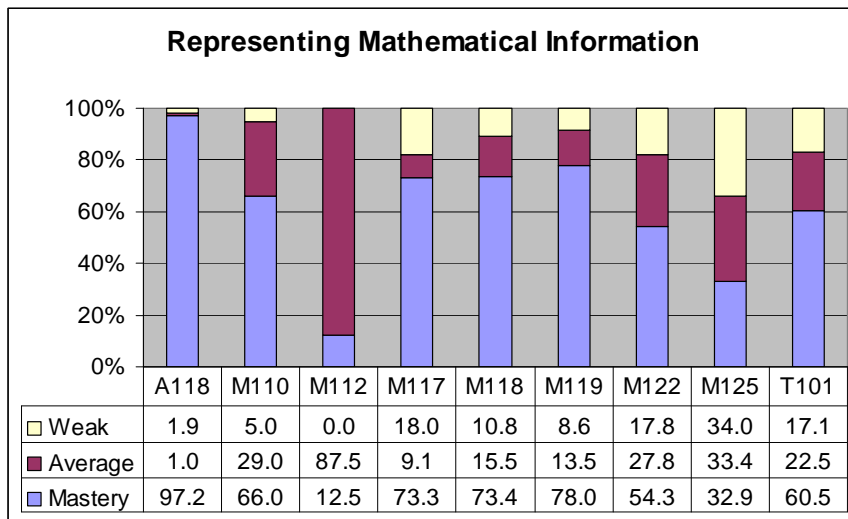
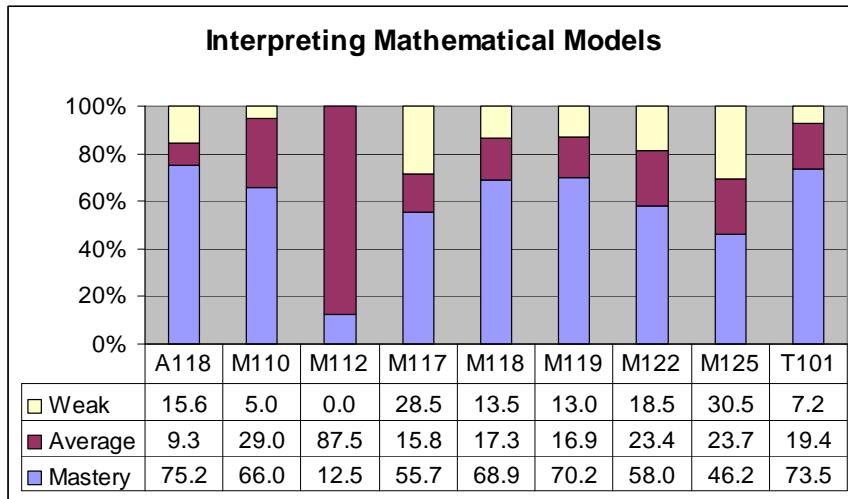
- A118 – Finite Mathematics for the Social & Biological Sciences
- M110 – Excursions in Mathematics
- M112 – Quantitative Literacy 1
- M117 – Intermediate Algebra
- M118 – Finite Mathematics
- M119 – Brief Survey of Calculus 1
- M122 – College Algebra
- M125 – Precalculus Mathematics
- T101 – Mathematics for Elementary Teachers 1

One approved course is not included in this report: M215 – Analytic Geometry & Calculus 1. Very few students complete M215 without first completing one of the other general education courses above.

A subset of questions from the final exam was selected. If a question was valued at 5 points, for example, then a score of 0-2 was categorized as weak, 3-4 as average, and 5 as mastery.

In general, students are somewhat weaker with interpreting mathematical models (Outcome A) than representing mathematical information (Outcome B). M125 and T101 are the exceptions with a larger percent at the weak level for Outcome B. Some courses do have a large percent of students at the mastery level for both outcomes.

The graphs below show the average values for the periods of time for which data were available: Fall 2005 – Spring 2006 for A118, Fall 2006 for M110 and M112, and Fall 2004 – Spring 2006 for all other courses.



The Quantitative Reasoning Assessment Group will share a more detailed report of the assessment with the faculty of the lower level mathematics department, especially those who are involved in teaching the various courses that have been assessed.

## Written Communication Assessment Summary

The Improvement of Writing Committee performed a pilot assessment of 11 senior capstone papers selected from across the disciplines, the primary purpose of which was to test and refine the capstone rubric created by the previous year's committee. As a result of their assessment readings, the committee identified six specific changes in the language of various categories for the sake of clarity in order to enable greater consistency among readers. This trial assessment identified two key problems with senior level writing across the disciplines: 1) Students seem to be composing papers not for general academic audiences but for specific instructors, and 2) The lack of development of a thesis or central idea is a "common problem" with many of the papers.

In recent years the Writing Program has conducted several assessments that provide further insight. In 2003-04 the Writing Program conducted an assessment of writing skills, specifically, paraphrasing and summarizing, for the course W290 Writing in the Arts and Sciences. This pilot study was followed by a more robust study in 2004-05 that attempted to control for certain confounding variables hypothesized as a result of the first study. Both studies required students to read scholarly articles at the beginning and end of the semesters and accurately summarize their contents. Both studies showed student improvement from pre to post writing samples. The second study showed the percentage of summaries earning a 3 or 4 (a 4 point scale) increased from 6.7% on the pre-test to 33% on the post-test. In addition, the second study was able to compare the performance of individual students from pre to post writing sample that showed that 53% of students improved.

Although the 2004-05 Writing Program assessment study showed improvement in paraphrasing and summarizing skills, a result of the Writing Program's immediate response to the pilot assessment, a breakdown of student performance on individual paraphrasing and summarizing rubric criteria has revealed specific functions Writing Program coordinators are addressing as emphases for further W290 curriculum and staff development. Pedagogical efforts to target the 47% who did not improve are underway in the current semester. During the week of April 9-12, 2007, the Writing Program offered an instructor development workshop on preventing plagiarism, which also encompasses specific methods for the more effective teaching and assessment of paraphrasing and summarizing skills.

The assessment of written communication has identified a logistical problem associated with the use of course artifacts as a measurement probe: currently, there is no reliable process for obtaining a statistically valid artifact bank. Since this problem is likely to be a problem to many General Education goal assessments in the future, it is recommended that the General Education committee, the Vice-Chancellor for Academic Affairs, and the Institutional Research and Assessment Office work together to develop requisite artifact collection policies and to collect the artifacts prior to any particular goal assessment. Non-course-artifact assessment methodologies should also be explored to either supplement or replace the course-artifact method in particular instances.

## **Oral Communication Assessment Summary**