

**RESULTS
OF
THE ACADEMIC PROFILE
ASSESSMENT**



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Prepared by: Office of Institutional Research

Acknowledgements:

Unless otherwise noted, the information and figures are borrowed or adapted from *The Academic Profile Score Report and Interpretive Guide* (provided by the College Board and Educational Testing Service).

Individual Student Scores and Criterion-Referenced Proficiency Levels are available from the Office of Institutional Research.

THE ACADEMIC PROFILE

Introduction

Over the past several years, higher education has seen an increased concern in assessment of outcomes. National reports indicate problems with American education. These reports have raised questions and concerns with the public, state legislatures, higher education governing boards and individual institutions in determining how well we are accomplishing our missions in higher education. In 1986, Educational Testing Service (ETS) and the College Board began developing an instrument to assist institutions in their endeavor of assessing the outcomes of their general education programs.

Purpose and Methodology

The Academic Profile was developed to assist in assessing the outcomes of general education programs to improve the quality of instruction and learning. The focus of the academic profile is on the academic skills developed through general education or core courses.

The exam is designed to test college-level reading, writing, critical thinking and mathematics within the context of the humanities, social sciences and natural sciences. Stimulus material is used from these three academic areas, to test the four skills, but students are not expected to bring specific knowledge about the content areas to the questions. It is expected that students who have taken core courses in these areas will be better able to read the materials and answer the accompanying questions than a student who has not taken the courses.

Two forms of the Academic Profile are available, the long form requires two and a half hours to administer. The short form requires 40 minutes. The short form is constructed by dividing the long form into four parts and using multiple-matrix sampling to assure random fourths of the students take each version.

Scores for the Academic Profile

Scores for the Academic Profile are reported in two ways: as criterion-referenced scores i.e., proficiency levels, and as norm-referenced scores.

Norm-referenced scores derive their meaning only from comparisons with other scores – scores of other students, scores of the same students at different time periods, or scores from other colleges and universities. Scale-scores as reported on the Institutional Summary and on the student roster are norm-referenced. There are eight norm-referenced scores: Humanities, Social Sciences, Natural Sciences, College-Level Reading, College-Level Writing, Critical Thinking, and Mathematics, plus a total score. All Subsequent forms of the Academic Profile are equated to this scale, which allows score comparisons over time.

Criterion-referenced scores (proficiency levels), unlike norm-referenced scores, have their own meanings. These scores or levels are defined in terms of specific competencies expected of students at each of three levels for: Writing, Mathematics, and Reading/Critical Thinking. The three levels are hierarchical; students who perform at Level 2 have also performed successfully at Level 1; students at Level 3 have also performed successfully at Levels 1 and 2.

For the short form version of the Academic Program used at MSU, the following scores were calculated:

Short Form

For total group tested:

- * eight norm-referenced scores
- * three proficiency level scores

For individual students:

- * norm-referenced total score

The summary scores in the graph reflect the matrix format of the Academic Profile: three academic area scores (Humanities, Social Sciences, and Natural Sciences), four skills scores (College-Level Reading, Writing, Critical Thinking, and Mathematics), and a total score.

These scores are reported as scale scores with the mean shown as the vertical line in the center of the shaded confidence band. The scales for the sub-scores range from 100 - 130 and the scale for the total score ranges from 400 - 500. Note that while all the sub-scores are on a similar numerical scale, the precise meaning of a score of 115, for example, will differ depending on the difficulty of the items comprising that sub-score.

Confidence Bands

All sampling results in some error when estimating a mean score for the total group of students (population) from which the sample was drawn. It is still important to know how close the mean score of the sample is to the mean score that would have been obtained had the entire population been tested. The confidence bands indicate the degree of accuracy pertaining to the statements about the performance of the population. The bands were developed using a 95 percent confidence level, which is the commonly accepted research standard when generalizing from a sample to a population. Confidence bands are affected by both the size and variability of the sample. Just as there is a band around the mean reported for an institution, a similar band is also around the score obtained by an individual student.

ACADEMIC PROFILE USE AT MISSISSIPPI STATE UNIVERSITY

The College of Education and the College of Engineering have administered the long-form questionnaire since the Fall of 1998. Beginning in the Fall 2000 semester, the short-form questionnaire was administered to a broader range of students to assess the University Core. The instrument will be administered each fall semester to continue this assessment.

The following summaries indicate MSU scores and comparative scores for the profiles.

Figure 1. Academic Area Sub-scores and Skills Dimension Sub-scores

MSU Students Tested	Academic Area Sub-Scores			Skill Dimension Sub-Scores				Total Score
	Humanities	Social Sciences	Natural Sciences	Reading	Writing	Critical Thinking	Math	
Fall 00 (n=842)	115.2	114.5	117.4	118.7	116.5	112.0	115.8	447.4
Fall 01 (n=970)	114.7	113.7	115.3	119.1	115.3	110.9	114.6	446.8
Fall 02 (n=923)	115.1	114.2	115.4	119.6	115.6	111.3	114.7	448.1
Fall 03 (n=856) *	115.0	114.2	115.5	119.3	115.1	111.5	115.7	448.5

*Scores recorded are weighted averages of Fall 2003 and Spring 2004

Figure 2. Mean Scores for Three Sub-groups

Class Level	Fall 2000	Fall 2001	Fall 2002	Fall 2003*
Freshman	440.8 (n=16)	443.3 (n=28)	441.1 (n=18)	--
Sophomore	445.2 (n=173)	443.9 (n=168)	447.0 (n=172)	441.5 (n=99)
Junior	446.8 (n=408)	446.9 (n=534)	447.0 (n=447)	446.3 (n=417)
Senior	452.2 (n=197)	450.9 (n=220)	451.7 (n=273)	454.7 (n=317)
Gender				
Male	447.7 (n=406)	448.5 (n=420)	451.1 (n=403)	450.0 (n=475)
Female	447.0 (n=406)	445.7 (n=539)	445.9 (n=513)	446.8 (n=376)
Completion of General Ed Requirements				
50% Completed	441.7 (n=165)	441.0 (n=170)	443.0 (n=138)	439.7 (n=87)
75% Completed	447.7 (n=347)	446.8 (n=378)	448.3 (n=376)	446.9 (n=360)
100% Completed	452.7 (n=242)	451.3 (n=355)	451.6 (n=335)	453.4 (n=371)
Total Score	447.4 (n=842)	446.8 (n=970)	448.1 (n=923)	448.5 (n=856)

*Scores recorded are weighted averages of Fall 2003 and Spring 2004

**Figure 3. Academic Area Sub-scores and Skill Dimension Sub-scores
Comparisons with Research/Doctoral Universities and All Academic Profile Participants**

	Mean Scores					
	Mississippi State University				Res/Doc	All
Academic Area Sub-Scores	Fall 2000 n=842	Fall 2001 n=970	Fall 2002 n=923	Fall 2003 n=856	n=24,247	n=130,860
Humanities	115.2	114.7	115.1	115.0	115.8	114.8
Social Sciences	114.5	113.7	114.2	114.2	114.5	113.4
Natural Sciences	117.4	115.3	115.4	115.5	115.8	114.9
Skill Dimension Sub-Scores						
Reading	118.7	119.1	119.6	119.3	119.9	118.5
Writing	116.5	115.3	115.6	115.1	115.4	114.5
Critical Thinking	112.0	110.9	111.3	111.5	111.9	110.9
Math	115.8	114.6	114.7	115.7	114.7	113.6
Total Score	447.4	446.8	448.1	448.5	448.6	444.3