

**FERRIS STATE UNIVERSITY
ACADEMIC PROFILE ASSESSMENT
2002-3**

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The Academic Profile Test.

The Academic Profile test was developed by the Educational Testing Service for outcomes assessment of general education in colleges and universities. The questions on the test are concerned with issues, themes and ideas from the humanities, social sciences, natural sciences and mathematics. The test also measures “a student’s ability to read carefully, to make judgments about the clarity, correctness, or organization of the materials as pieces of writing, and to think critically about the issues and arguments presented....The Academic Profile focuses on the academic *skills developed* through general education courses rather than on *knowledge acquired* about the subject taught in these courses....The academic skills...measured by the test were those identified in the Association of American Colleges 1985 report *Integrity in the College Curriculum.*” ¹

Ferris State University chose to use the Academic Profile Test as one assessment of our general education curriculum outcomes. Using Academic Profile provides a measure which can be compared with those of comparable colleges and universities nationally.

Ferris Students who take the Academic Profile Test.

Ferris State University administered the Academic Profile in 1996, 1998, 2000 and 2002. The tests are administered to students in English 150, a general education course in which most students enroll during the freshman year, and other 100-level courses in the humanities, such as Humanities 100. Tests are also administered to students in 300-level general education courses, such as English composition, Eastern Religions and Literature courses. The Academic Profile offers two versions of its test, long and short. The University General Education Committee selected the short version of the test for general education outcomes assessment. The short Academic Profile Test requires at least 50 minutes to administer and complete.

Test Categories

The Ferris outcomes assessment categories show a high degree of correlation with the categories of the Academic Profile Test, allowing for an accurate interpretation of outcome data. The Ferris State University General Education Assessment Outcomes Committees are Communication, Critical Thinking & Lifelong Learning, Cultural

Enrichment, Global Consciousness, Mathematics, Race/Ethnicity and/or Gender, Reading, Scientific Understanding, Social Awareness, and Writing. The Academic Profile Test assesses the following categories: Critical Thinking, Humanities, Mathematics, Natural Sciences, Reading, Social Sciences, Writing.

How the test was Administered.

During Fall (02) and the beginning of Winter (03) semester, faculty who teach English 150 or Humanities 100 and 300-level courses were requested to volunteer for Academic Profiles testing. Faculty were very cooperative in including their students in this assessment. A positive faculty attitude and the value placed on assessment by faculty are major factors in ensuring a positive student attitude, according to ETS.² This is very important in determining students’ motivation and attitude about taking this challenging test, which surely affects the results. In 2002, Ferris tested 400 freshmen and 407 upperclassmen. The 2000 Ferris testing group included 580 freshmen and 429 upperclassmen and in 1996 355 freshmen and 236 seniors. Testing was coordinated by Susan Booker Morris, General Education Coordinator, and administered by Ms. Patricia Lockhart.

Academic Profile Overall Results

Ferris State University, 2002-3

The overall results for the 2002 Academic Profile Test at Ferris State University are in Figure 1.

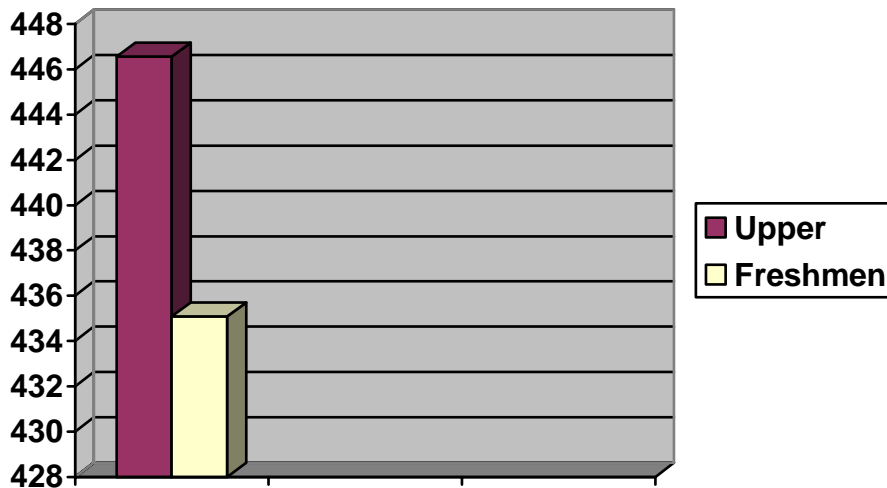
FIGURE 1: Overall Results

FRESHMEN 2002 (400 students)	POSSIBLE RANGE	MEAN SCORE	25TH %	50TH %	75TH %
TOTAL SCORE	400 TO 500	435.08	425	435	444
CRITICAL THINKING	100 TO 130	108.40	104	108	111
READING	100 TO 130	115.78	111	116	120
WRITING	100 TO 130	112.14	109	112	115
MATHEMATICS	100 TO 130	112.18	108	111	115
HUMANITIES	100 TO 130	112.39	107	113	117
SOCIAL SCIENCES	100 TO 130	111.17	107	110	115

NATURAL SCIENCES	100 TO 130	112.18	109	111	116
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UPPERCLASSMEN 2002 (407 students)	POSSIBLE RANGE	MEAN SCORE	25TH %	50TH %	75TH %
TOTAL SCORE	400 TO 500	446.55	433	446	461
CRITICAL THINKING	100 TO 130	111.02	106	111	115
READING	100 TO 130	118.68	114	119	125
WRITING	100 TO 130	114.83	111	115	118
MATHEMATICS	100 TO 130	115.28	110	115	119
HUMANITIES	100 TO 130	114.67	109	114	120
SOCIAL SCIENCES	100 TO 130	113.84	110	115	121
NATURAL SCIENCES	100 TO 130	114.89	110	115	119

Overall Mean Scores, 2002



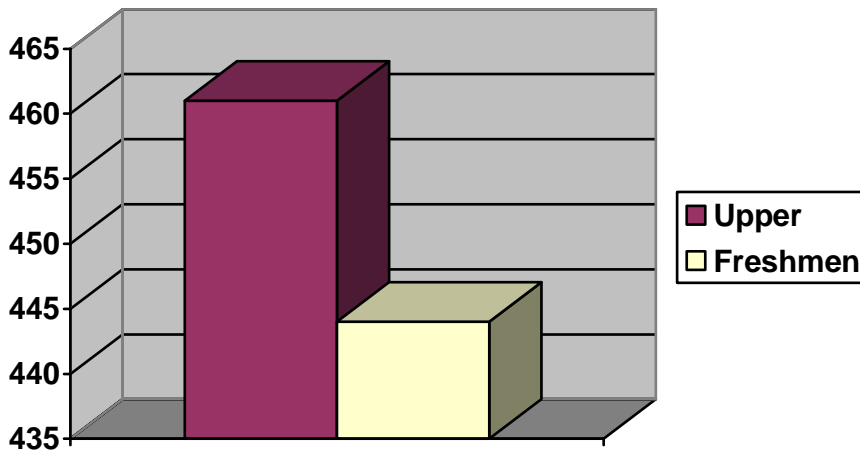
Ferris' Academic Profile comparative group.

Academic Profile data are reported for five particular groups of institutions:

- Research/Doctorate Universities
- Comprehensive Colleges and Universities
- Liberal Arts Colleges
- Associate-of-Arts Colleges
- Specialized Institutions

Ferris is included in the Comprehensive Colleges and Universities category, even though the university offers a considerable number of associate degree programs and two professional medical degrees. The Academic Profile Comprehensive Colleges and Universities group fits within the Carnegie Classification category "Master's (Comprehensive) Colleges and Universities....The institutions offer baccalaureate programs and, in many cases, graduate education through the master's degree. More than half of their baccalaureate degrees are offered in two or more occupational or professional areas, such as engineering or business administration."³ The Academic Profile Comparative Data Guide includes test results for 34,563 upperclassmen and 26,511 freshmen at Comprehensive Colleges and Universities.

Figure 2: Mean score in 75th percentile nationally



As in earlier test reports, Ferris students continue to show improvement from freshmen to upperclassmen in general education.

A comparison of mean scores for 1996, 2000, and 2002 shows that Ferris upperclassmen score better than freshmen in general education subjects. In fact, the improvement in the most recent tests is considerably greater than the improvement reported for 1996. The

improvements in mean scores of upperclassmen over freshmen in 2002, 2000 and 1996 are as follows:

2002	11.47
2000	12.3
1996	8

The results are detailed in Figure 3.

Academic Profile Scores 2002, 2000 & 1996

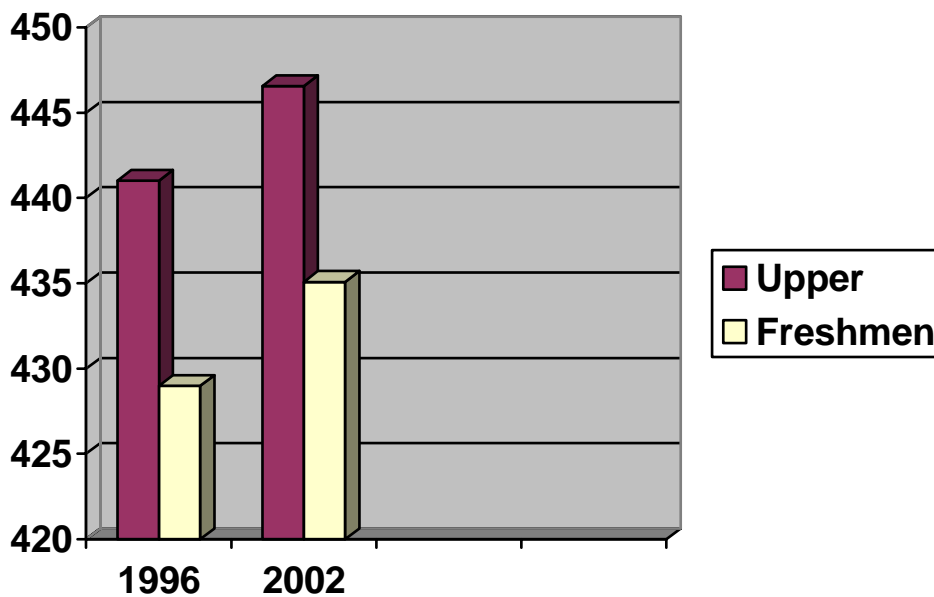
Figure 3

	2002 Freshmen	2002 Upper Classmen	2000 Freshmen	2000 Upper Classmen	1996 Freshmen	1996 Upper Classmen
Number of Students Tested	400	407	580	429	355	236
Total Mean Score	435.08	446.55	434.8	447.1	440.6	448.6
Humanities	112.39	114.67	110.8	114.8	109	113
Social Sciences	111.17	113.84	110.8	114.9	109	113
Natural Sciences	112.63	114.89	112.9	117.3	111	116
College Reading	115.78	118.68	114	119.3	112	117
College Writing	112.14	114.83	111.8	115.2	110	114
Critical Thinking	108.40	111.02	108.5	112.6	107	110
Mathematics	112.18	115.28	112.8	115.6	110	114

Ferris 2002 freshmen scored higher than the 1996 freshmen, yet the 2002 upperclassmen still scored higher than the 1996 upperclassmen.

Significantly, not only did the upperclassmen show more improvement over the freshmen in 2002 than they did in 1996, but also the 2002 freshmen started out scoring much higher than the freshmen in 1996. Yet, the 2002 upperclassmen still gained significantly over the 2002 freshmen, and at a higher level of achievement than the 1996 upperclassmen. See Figure 4.

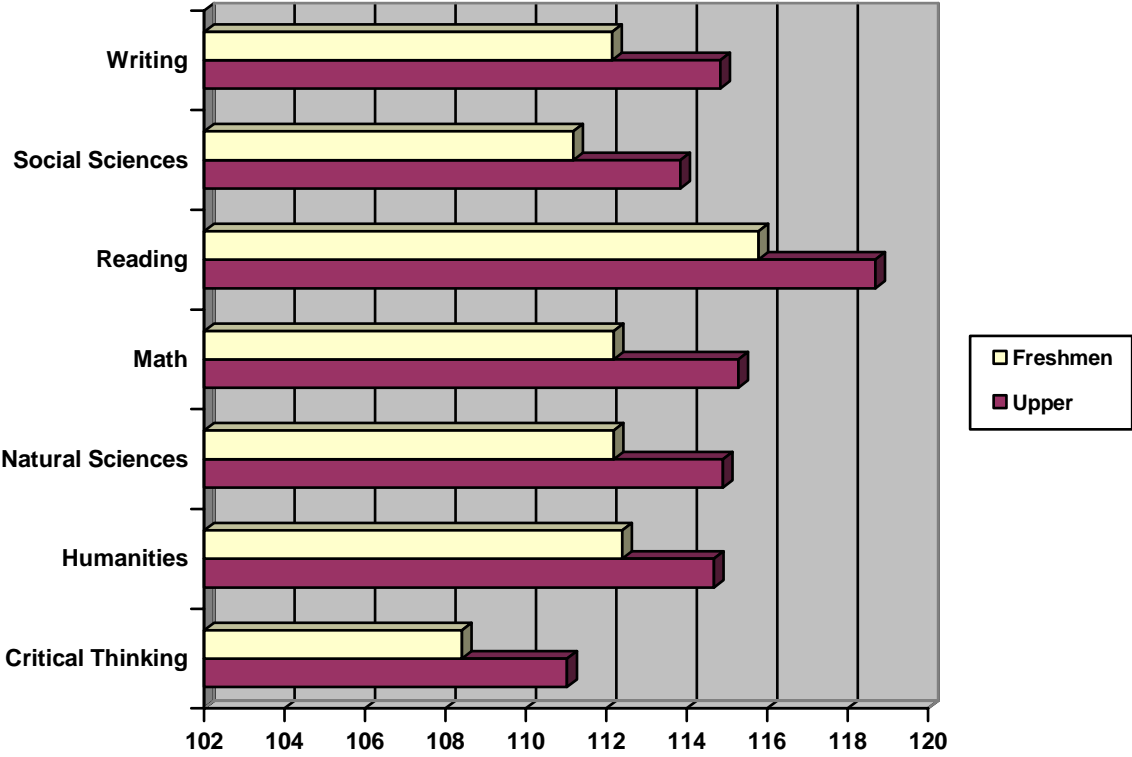
Mean score comparison of Ferris 1996 and Ferris 2002 Freshmen and Upperclassmen.
Figure 4



Comparisons of academic skills and proficiencies subscores show an increase in junior/senior student performance.

In addition to overall mean scores, the Academic Profile tests and reports mean scores on specific categories, reported as “skills subscores” (Critical thinking, Reading, Writing and Mathematics) and “context-based subscores” (Humanities, Social Sciences and Natural Sciences). See the graph in Figure 5.

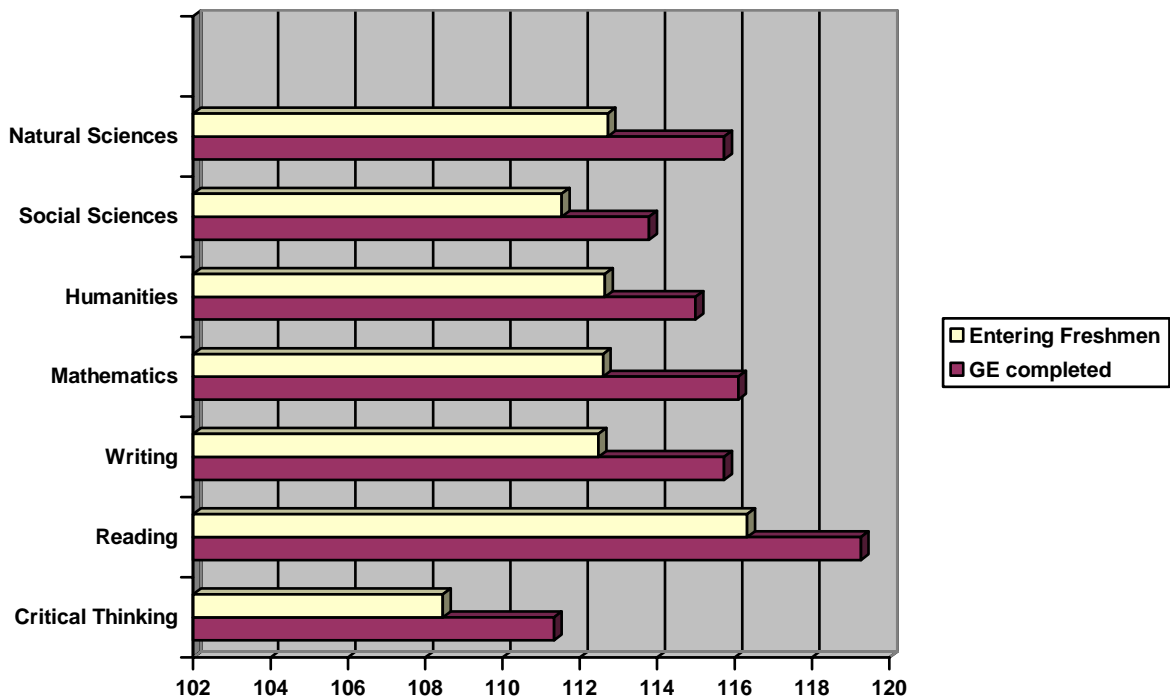
**Comparison of Upperclassmen to Freshmen,
by category, 2002
Figure 5**



The most direct measure of the effect of general education is to compare the scores of those students who have completed their general education requirements to those who have only started.

The Academic Profile allows a comparison between students who have complete their general education requirements and those who have completed none of their requirements. The results indicated a significant improvement in scores for those Ferris students who have completed their requirements. As indicated in Figure 6, the improvement was in all categories.

Comparison of Entering Freshmen with students who have completed their General Education Requirements, by category, 2002
Figure 6



Ferris upperclassmen have a higher overall level of proficiency than Ferris freshmen in Critical Thinking, Writing, Reading and Mathematics.

The Academic Profile Score Report includes an analysis of scores that provides information about the proficiency level of the students taking the test. Students' scores are measured according to a level of proficiency in the following areas: Critical Thinking, Reading, Writing and Mathematics. In explanation of the analysis, the ETS states:

The skills measured by the Academic Profile are grouped into proficiency levels---three proficiency levels for writing, three for mathematics, and three for the combined set of skills involved in reading and critical thinking. The tables... indicate the estimated percentages of students who are proficient, marginal and not proficient at each proficiency level in reading and critical thinking, in writing and mathematics. A student classified as marginal is one whose test results do not provide enough evidence to classify the student either as proficient or as not proficient.⁴

Results are detailed in the following tables (Figure 7).

Figure 7: Ferris freshmen and upperclass students compared by Level of Proficiency

<i>Ferris: Freshmen</i>	<i>Proficient (percentage)</i>	<i>Marginal (percentage)</i>	<i>Not Proficient (percentage)</i>
<i>Skill Dimension and Level</i>			
Critical Thinking	0	5	95
Reading 2	17	22	60
Reading 1	53	29	18
Writing 3	3	16	81
Writing 2	7	32	60
Writing 1	49	33	19
Math 3	2	14	84
Math 2	19	28	53
Math 1	46	31	23

<i>Ferris: Seniors</i>	<i>Proficient (percentage)</i>	<i>Marginal (percentage)</i>	<i>Not Proficient (percentage)</i>
<i>Skill Dimension and Level</i>			
Critical Thinking	2	13	85
Reading 2	29	25	46
Reading 1	69	21	10
Writing 3	3	32	65
Writing 2	16	42	43
Writing 1	66	22	12
Math 3	8	22	70
Math 2	35	26	39
Math 1	58	31	11

Ferris Students' Academic Profile scores in 2002-3 fit well within the national sample of Comprehensive Colleges and Universities.

Although the national proficiency levels tend to be higher than those at Ferris (especially in Critical Thinking, Reading and Writing), Ferris students begin at a much lower level of proficiency than the national level. The increase in the Ferris students' level is therefore comparable. As entry requirements slowly increase at Ferris, as planned, this discrepancy should decrease, although it warrants close attention.

(see Comparative Data Guide at www.ets.org/hea/acpro and Figure 8, below)

Figure 8: Comparison of Ferris and National Proficiency Levels

<i>National: Freshmen</i>	<i>Proficient (percentage)</i>	<i>Marginal (percentage)</i>	<i>Not Proficient (percentage)</i>
<i>Skill Dimension and Level</i>			
Critical Thinking	2	9	89
Reading 2	24	21	54
Reading 1	57	25	18
Writing 3	6	22	72
Writing 2	13	36	51
Writing 1	58	29	13
Math 3	4	13	82
Math 2	22	30	48
Math 1	50	31	19

<i>National: Seniors</i>	<i>Proficient (percentage)</i>	<i>Marginal (percentage)</i>	<i>Not Proficient (percentage)</i>
<i>Skill Dimension and Level</i>			
Critical Thinking	5	16	78
Reading 2	40	22	38
Reading 1	73	17	10
Writing 3	10	32	58
Writing 2	22	41	37
Writing 1	73	20	7
Math 3	7	18	75
Math 2	31	30	40
Math 1	59	27	14

<i>Ferris: Freshmen</i>	<i>Proficient (percentage)</i>	<i>Marginal (percentage)</i>	<i>Not Proficient (percentage)</i>
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General Education Outcomes Assessment Committees will consider the data from Academic Profile tests, along with other assessment instruments which they have developed, in seeking to improve our efforts in general education.

These data will be analyzed by the ten general education outcomes assessment committees⁵ to assure that the general education skills and proficiencies of Ferris students are adequately measured and successes and weaknesses in general education identified. Some assessment committees have also developed other instruments to assist in the task of continually analyzing the desired outcomes in each of the general education areas and attempting to determine whether Ferris is successful in achieving them. Each committee is to report its findings to the University General Education Committee, via the General Education Coordinator, and is requested to report its findings to the faculty who teach in the specific general education areas through whatever means it deems reasonable.

¹ The Academic Profile User's Guide, The College Board and Educational Testing Service, 1998

² The Academic Profile Comparative Data Guide, Educational Testing Service, 2000.

³ A Classification of Institutions of Higher Education, The Carnegie foundation for the Advancement of Teaching, 1994 edition

⁴ The Academic Profile Score Report and Interpretive Guide, 2003

⁵ Ferris State University General Education Assessment Committee areas: Communication, Critical Thinking and Lifelong Learning, Cultural Enrichment, Global Consciousness, Mathematics, Race/Ethnicity and/or Gender, Reading, Scientific Understanding, Social Awareness, Writing. The members of the committees include elected and volunteer representatives from throughout the university community.