MAPP

Measures of Academic Proficiency and Progress
Summary of Test Results for Incoming Freshmen 2008-2009

Overview

The *Measure of Academic Proficiency and Progress* (MAPP) is administered every year to incoming freshmen and every third year as a follow-up to students who have completed approximately 60 credit hours. The MAPP is designed to assess four core skill areas — critical thinking, reading, writing and mathematics — in a single test that the Voluntary System of Accountability (VSA) has selected as a gauge of general education outcomes. Specifically, the MAPP test is intended to measure: (1) proficiency in critical thinking, reading, writing and mathematics in the context of humanities, social sciences and natural sciences and, (2) academic skills developed, versus subject knowledge taught, in general education courses

The test is administered to:

- gain a unified picture of the effectiveness of SUU's general education program to meet requirements for accreditation and performance funding
- promote curriculum improvement with actionable score reports that can be used to pinpoint strengths and areas of improvement
- provide comparative data on student performance with more than 380 institutions and 375,000 students nationwide

Test Design

Questions on the MAPP test are multiple-choice and are arranged in blocks of three to eight. Each section tests the same types of skills. This integrated design prevents a particular skill area from appearing all at once late in the test when fatigue can affect student performance. Faculty can add up to 50 locally authored multiple-choice questions and nine demographic questions to meet specific program needs.

Summary of Proficiency Classifications
The skills measured by the MAPP test 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 table and graph show the number and percentage of students who are proficient, marginal, and not proficient at each proficiency level in reading and critical thinking, 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.

Measures of Academic Proficiency and Progress

Summary of Proficiency Classifications
To show how many students are proficient at each level

Southern Utah University

Abbreviated Form

Test Description: Abbreviated Form A

Number of students tested: 867

**Number of students included in these statistics:** 864

Number of students excluded (see roster): 3

Cohort Name: UNIV 1000 Fall 2008

Close Date: 04/17/2009

Student Level: All

Skill Dimension	Proficiency Classification		
	Proficient	Marginal	Not Proficient
Reading, Level 1	65%	20%	15%
Reading, Level 2	34%	20%	47%
Critical Thinking	4%	18%	78%
Writing, Level 1	57%	31%	12%
Writing, Level 2	16%	31%	53%
Writing, Level 3	5%	22%	73%
Mathematics, Level 1	49%	29%	22%
Mathematics, Level 2	22%	27%	51%
Mathematics, Level 3	6%	12%	82%
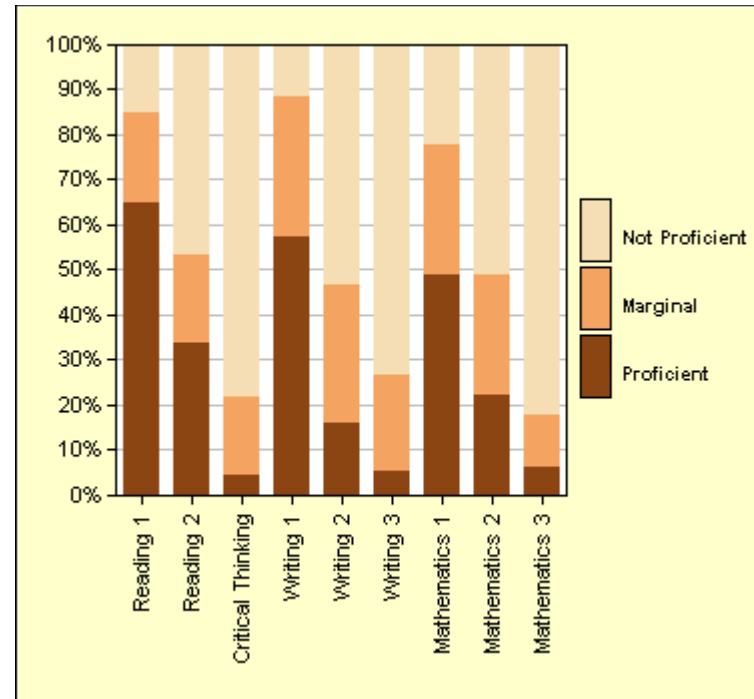
In addition to a total score, proficiency classifications (proficient, marginal or not proficient) measure how well SUU students have mastered each level of proficiency within three skill areas: (1) Reading/Critical Thinking, (2) Writing. And (3) Mathematics

Reading/Critical Thinking

Level I

Students who are proficient can:

- recognize factual material explicitly presented in a reading passage
- understand the meaning of particular words or phrases in the context of a reading passage

Level II

Students who are proficient can:

- synthesize material from different sections of a passage
- recognize valid inferences derived from material in the passage
- identify accurate summaries of a passage or of significant sections of the passage
- understand and interpret figurative language
- discern the main idea, purpose or focus of a passage or a significant portion of the passage

Level III

Students who are proficient can:

- evaluate competing causal explanations
- evaluate hypotheses for consistency with known facts
- determine the relevance of information for evaluating an argument or conclusion
- determine whether an artistic interpretation is supported by evidence contained in a work
- recognize the salient features or themes in a work of art
- evaluate the appropriateness of procedures for investigating a question of causation

- evaluate data for consistency with known facts, hypotheses or methods
- recognize flaws and inconsistencies in an argument

Writing Skills

Level I

Students who are proficient can:

- recognize agreement among basic grammatical elements (e.g., nouns, verbs, pronouns and conjunctions)
- recognize appropriate transition words
- recognize incorrect word choice
- order sentences in a paragraph
- order elements in an outline

Level II

Students who are proficient can:

- incorporate new material into a passage
- recognize agreement among basic grammatical elements (e.g., nouns, verbs, pronouns and conjunctions) when these elements are complicated by intervening words or phrases
- combine simple clauses into single, more complex combinations
- recast existing sentences into new syntactic combinations

Level III

Students who are proficient can:

- discriminate between appropriate and inappropriate use of parallelism
- discriminate between appropriate and inappropriate use of idiomatic language
- recognize redundancy

- discriminate between correct and incorrect constructions
- recognize the most effective revision of a sentence

Mathematics

Level I

Students who are proficient can:

- solve word problems that would most likely be solved by arithmetic and do not involve conversion of units or proportionality. These problems can be multi-step if the steps are repeated rather than embedded.
- solve problems involving the informal properties of numbers and operations, often involving the Number Line, including positive and negative numbers, whole numbers and fractions (including conversions of common fractions to percent, such as converting "1/4" to 25%)
- solve problems requiring a general understanding of square roots and the squares of numbers
- solve a simple equation or substitute numbers into an algebraic expression
- find information from a graph. This task may involve finding a specified piece of information in a graph that also contains other information.

Level II

Students who are proficient can:

- solve arithmetic problems with some complications, such as complex wording, maximizing or minimizing, and embedded ratios. These problems include algebra problems that can be solved by arithmetic (the answer choices are numeric).
- simplify algebraic expressions, perform basic translations, and draw conclusions from algebraic equations and inequalities. These tasks are more complicated than solving a simple equation, though they may be approached arithmetically by substituting numbers.
- interpret a trend represented in a graph, or choose a graph that reflects a trend
- solve problems involving sets; problems have numeric answer choices

Level III

Students who are proficient can:

- solve word problems that would be unlikely to be solved by arithmetic; the answer choices are either algebraic expressions or numbers that do not lend themselves to back-solving

- solve problems involving difficult arithmetic concepts such as exponents and roots other than squares and square roots and percent of increase or decrease
- generalize about numbers, (e.g., identify the values of (x) for which an expression increases as (x) increases)
- solve problems requiring an understanding of the properties of integers, rational numbers, etc.
- interpret a graph in which the trends are to be expressed algebraically or one of the following is involved: exponents and roots other than squares and square roots, percent of increase or decrease
- solve problems requiring insight or logical reasoning.

MAPP
Measures of Academic Proficiency and Progress

Summary of Scaled Scores
To show the ability of the group taking the test

Southern Utah University
Abbreviated
Test Description: Abbreviated Form A
Number of students tested: 867
Number of students included in these statistics: 864
Number of students excluded (see roster): 3

Cohort Name: UNIV 1000 Fall 2008
Close Date: 04/17/2009
Student Level: All

	Possible Range	Mean Score	95% Confidence Limits* for Mean	Standard Deviation	25th Percentile	50th Percentile	75th Percentile
Total Score	400 to 500	441.61	440 to 443	17.46	429	439	453
Skills Subscores:							
Critical Thinking	100 to 130	111.21	110 to 112	6.03	106	112	116
Reading	100 to 130	117.72	117 to 119	6.69	113	117	124

Writing	100 to 130	113.51	113 to 114	4.80	111	114	117
Mathematics	100 to 130	112.70	112 to 113	5.74	108	112	117
Context-Based Subscores:							
Humanities	100 to 130	114.68	114 to 116	6.19	110	113	119
Social Sciences	100 to 130	112.92	112 to 114	5.92	108	113	117
Natural Sciences	100 to 130	114.81	114 to 116	5.58	110	114	120

*The confidence limits are based on the assumption that the questions contributing to each scaled score are a sample from a much larger set of possible questions that could have been used to measure those same skills. If the group of students taking the test is a sample from some larger population of students eligible to be tested, the confidence limits include both sampling of students and sampling of questions as factors that could cause the mean score to vary. The confidence limits indicate the precision of the mean score of the students actually tested, as an estimate of the "true population mean" - the mean score that would result if all the students in the population could somehow be tested with all possible questions. These confidence limits were computed by a procedure that has a 95 percent probability of producing upper and lower limits that will surround the true population mean. The population size used in the calculation of the confidence limits for the mean scores in this report is 864.

MAPP

Measures of Academic Proficiency and Progress

Scaled Score Distributions

Skills Subscores

Southern Utah University

Abbreviated

Test Description: Abbreviated Form A
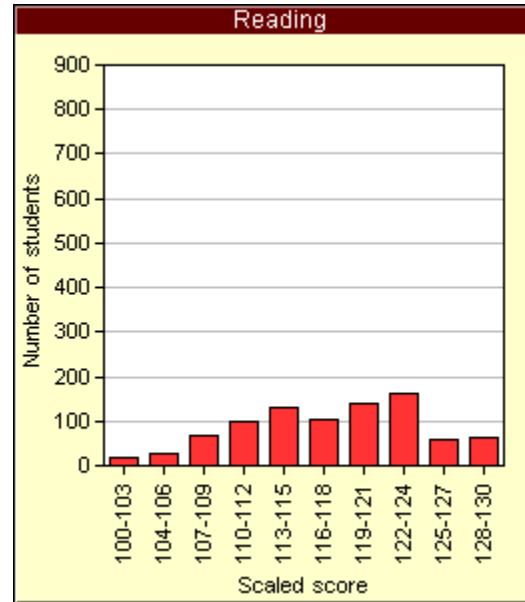
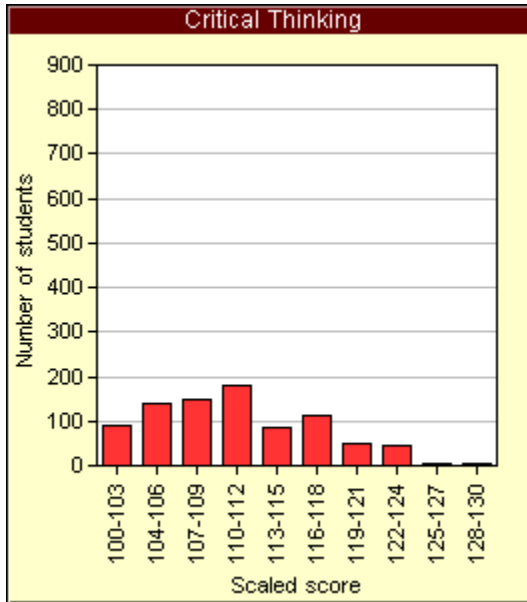**Number of students tested:** 867

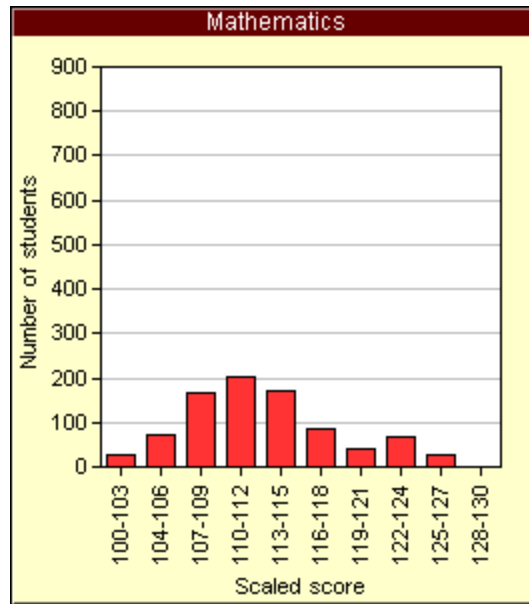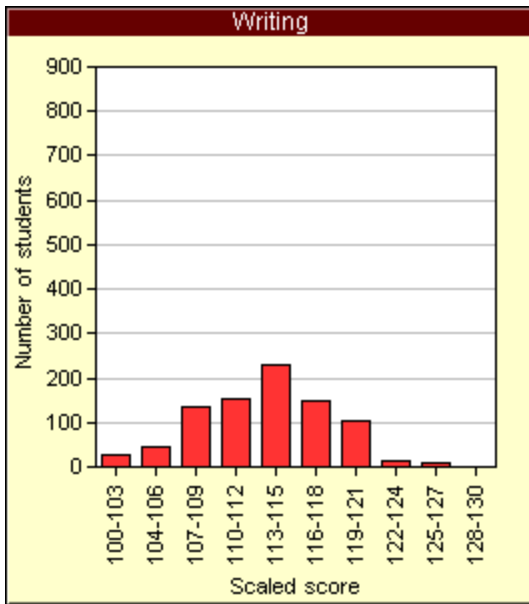**Number of students included in these statistics:** 864

Number of students excluded (see roster): 3

Cohort Name: UNIV 1000 Fall 2008

Close Date: 04/17/2009

Student Level: All

Writing

Number of students

900
800
700
600
500
400
300
200
100
0

Scaled score

100-103
104-106
107-109
110-112
113-115
116-118
119-121
122-124
125-127
128-130

Mathematics

Number of students

900
800
700
600
500
400
300
200
100
0

Scaled score

100-103
104-106
107-109
110-112
113-115
116-118
119-121
122-124
125-127
128-130

MAPP

Measures of Academic Proficiency and Progress

Scaled Score Distributions

Academic Area Subscores

Southern Utah University

Abbreviated

Test Description: Abbreviated Form A
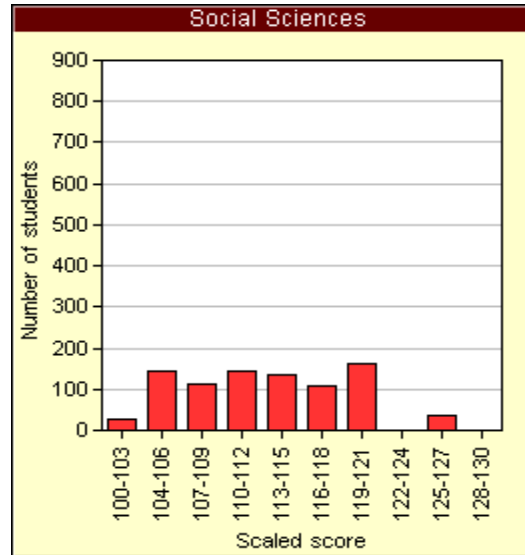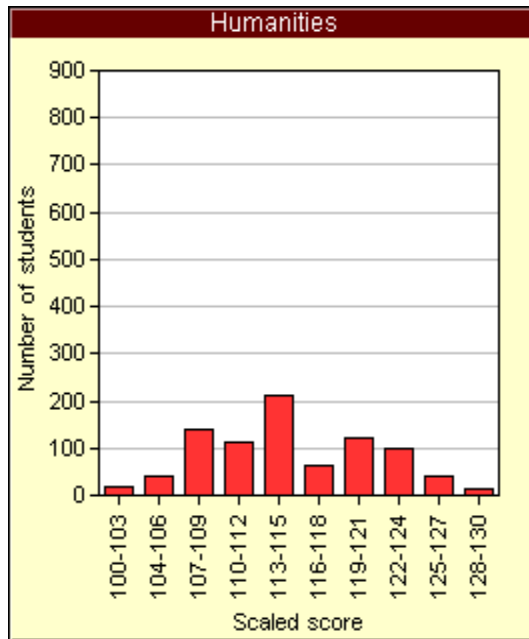
Number of students tested: 867
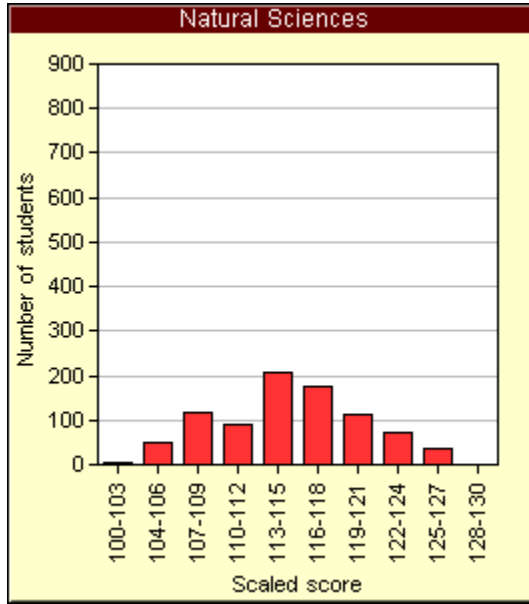
Number of students included in these statistics: 864

Number of students excluded (see roster): 3

Cohort Name: UNIV 1000 Fall 2008

Close Date: 04/17/2009

Student Level: All

Natural Sciences

MAPP
Measures of Academic Proficiency and Progress

Scaled Score Distributions
Total

Southern Utah University

Abbreviated

Test Description: Abbreviated Form A

Number of students tested: 867

Number of students included in these statistics: 864

Number of students excluded (see roster): 3

Cohort Name: UNIV 1000 Fall 2008

Close Date: 04/17/2009

Student Level: All