

CAAP

Content Analysis Report

LUBBOCK CHRISTIAN UNIVERSITY

Institution Code: 4123

Institution Type: 4-Year

Subgroup: none

Test Date: Spring 2016

Normative Group: National 4-year Colleges

Introduction

This report provides information intended to help postsecondary institutions better identify specific content areas in which their students are strong or weak relative to a normative group of students.

Results within this report are generated after several crucial steps:	For each CAAP test that your students have taken:
<ol style="list-style-type: none">1. Students in both the local and normative groups (or, cohorts) are classified into proficiency groups according to whether scale scores for a given CAAP test were in the top 25%, middle 50%, or bottom 25% of their cohort.2. For each CAAP test that a given student has taken (e.g., Mathematics, Reading, Writing Skills, Science, or Critical Thinking), item responses (correct or incorrect) are used to compute the percentage of items answered correctly within each content category.3. For each student proficiency group, students' percent-correct scores on items within content categories are then averaged, resulting in the percent of items correctly answered. This information is presented in this report's figures.	<ol style="list-style-type: none">1. Results for content categories are presented separately for the normative group and local cohorts of students. Note that the normative group represents students who have tested using a specific CAAP test form within the past three years. Local and normative group percents enable you to compare your students' performance to that of users in the normative group.2. In this report's figures, proficiency group results are presented adjacent to one another. This enables you to compare content category performance for your students among levels of proficiency.3. Results reflect major content categories within each CAAP test. For instance, the CAAP Reading test is composed of Referring Skills and Reasoning Skills content categories. Through a comparison of the percent of items correct across content categories, you can determine your students' relative strengths and weaknesses for each specific content category.

Mathematics

The CAAP Mathematics test is a 35-item test designed to measure student's proficiency in mathematical reasoning. The test assesses student's ability to solve mathematical problems typically encountered in a postsecondary curriculum. It emphasizes quantitative reasoning rather than the memorization of formulas.

Executive Summary

This report contains results from CAAP Mathematics form 11-G. Valid scores were obtained for 172 students. Table M-1 below shows differences in percentages between the local and normative groups. Differences with magnitudes less than 5%, between 5% and 10%, and greater than 10% are considered negligible, moderate, and substantial, respectively. Negative differences indicate areas where local students had more difficulty with content category items than did the normative group, whereas positive differences indicate that local students found items easier than did the normative group.

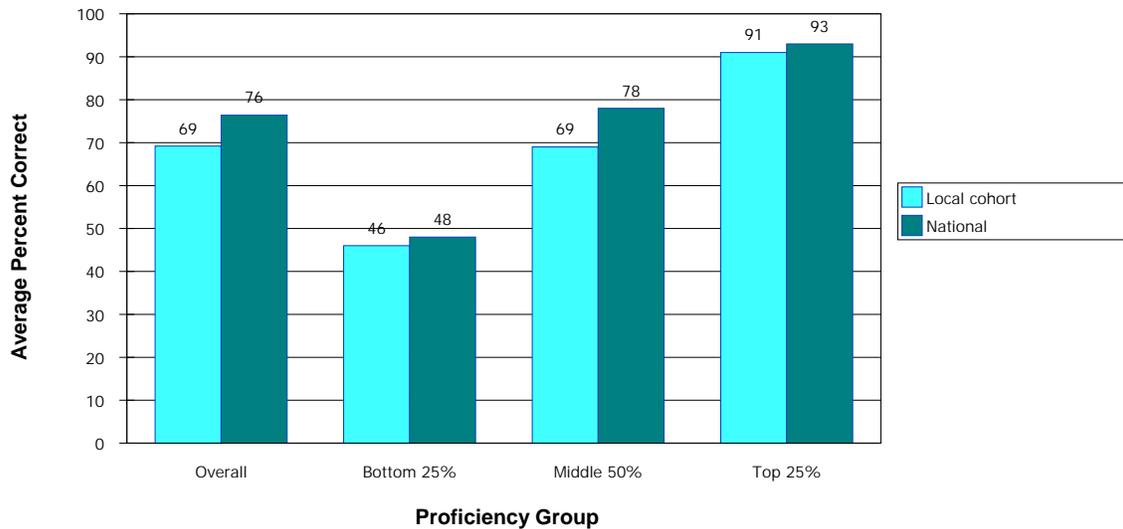
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Table M-1: Mathematics Comparison Highlights

Content Category	Local-Normative Group Differences in Percent Correct		
	Bottom 25%	Middle 50%	Top 25%
Prealgebra	- 2%	- 9%	- 2%
Elementary Algebra	4%	5%	3%
Intermediate Algebra	11%	9%	4%
Coordinate Geometry	19%	13%	3%
College Algebra	- 2%	2%	2%
Trigonometry	- 7%	2%	- 2%

Mathematics Content Area: Prealgebra

Figure M-1: Average Percent of Correct Answers in Prealgebra



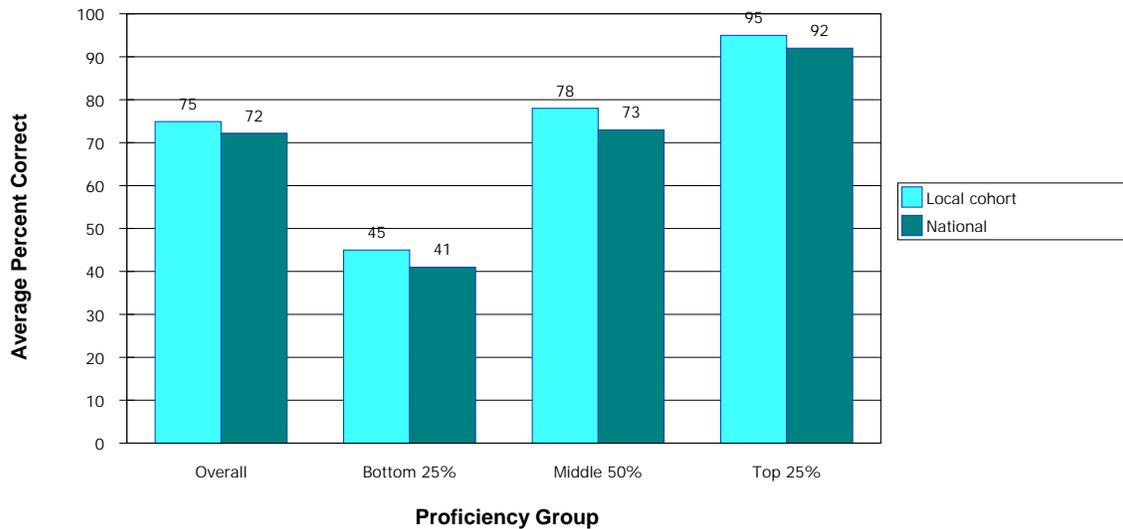
Interpretation Guide

The results in Figure M-1 are based on your students' responses to the Prealgebra items on the CAAP Mathematics test. There are four items in this content category, constituting approximately 11% of the Mathematics test. These items focus on knowledge and skills that are considered a prerequisite for further algebra courses (e.g., Operations with Integers, Conversions between Fractions and Decimals, Multiples and Factors of Integers, and Exponents (e.g., Scientific Notation).

Overall results and results for the bottom 25%, middle 50%, and top 25% of total CAAP Mathematics scores for the local and normative groups are provided. This is to enable you to compare bottom, middle, and top students in the local cohort to the bottom, middle, and top students in the normative group. Any differences less than 5%, between 5% and 10%, and greater than 10% are considered negligible, moderate, and substantial, respectively.

Mathematics Content Area: Elementary Algebra

Figure M-2: Average Percent of Correct Answers in Elementary Algebra



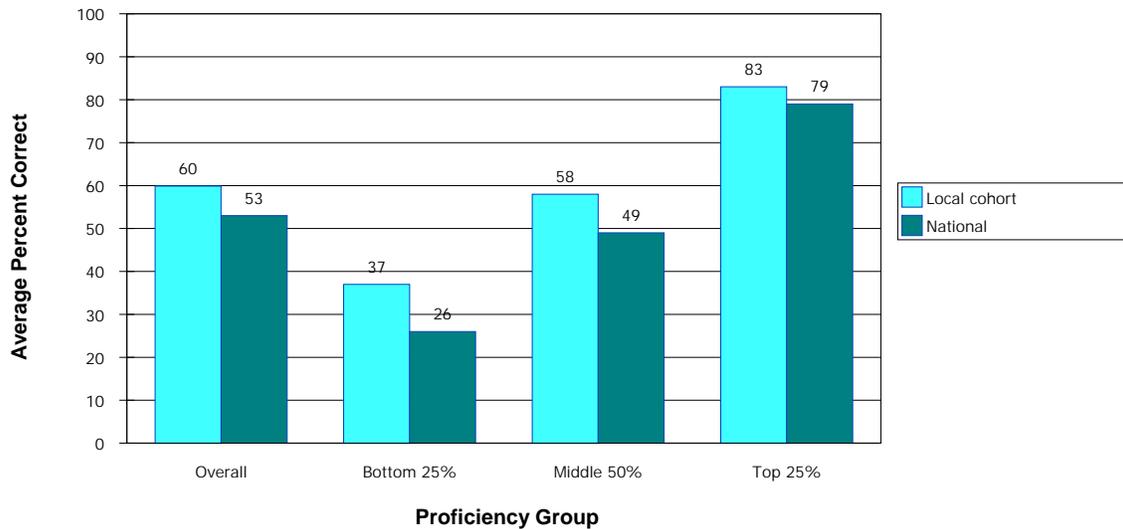
Interpretation Guide

The results in Figure M-2 are based on your students' responses to the Elementary Algebra items on the CAAP Mathematics test. There are four items in this content category, constituting approximately 11% of the Mathematics test. These items focus on knowledge and skills that are considered a prerequisite for further college mathematics courses (e.g., Basic Operations with Polynomials, Linear Equations in one Variable, Substituting Values into Algebraic Expressions, and Exponents).

Overall results and results for the bottom 25%, middle 50%, and top 25% of total CAAP Mathematics scores for the local and normative groups are provided. This is to enable you to compare bottom, middle, and top students in the local cohort to the bottom, middle, and top students in the normative group. Any differences less than 5%, between 5% and 10%, and greater than 10% are considered negligible, moderate, and substantial, respectively.

Mathematics Content Area: Intermediate Algebra

Figure M-3: Average Percent of Correct Answers in Intermediate Algebra



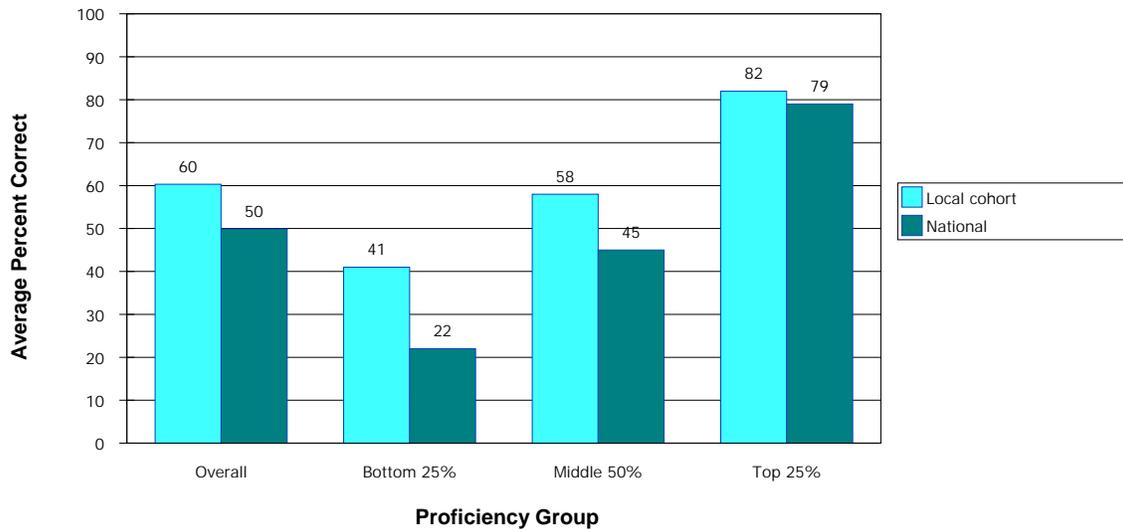
Interpretation Guide

The results in Figure M-3 are based on your students' responses to the Intermediate Algebra items on the CAAP Mathematics test. There are four items in this content category, constituting approximately 11% of the Mathematics test. These items focus on knowledge and skills that are considered a prerequisite for more advanced college mathematics courses (e.g., Systems of Linear Equations in two Variables and Exponents, Rational Expressions, the Quadratic Formula, and Absolute Value Inequalities).

Overall results and results for the bottom 25%, middle 50%, and top 25% of total CAAP Mathematics scores for the local and normative groups are provided. This is to enable you to compare bottom, middle, and top students in the local cohort to the bottom, middle, and top students in the normative group. Any differences less than 5%, between 5% and 10%, and greater than 10% are considered negligible, moderate, and substantial, respectively.

Mathematics Content Area: Coordinate Geometry

Figure M-4: Average Percent of Correct Answers in Coordinate Geometry



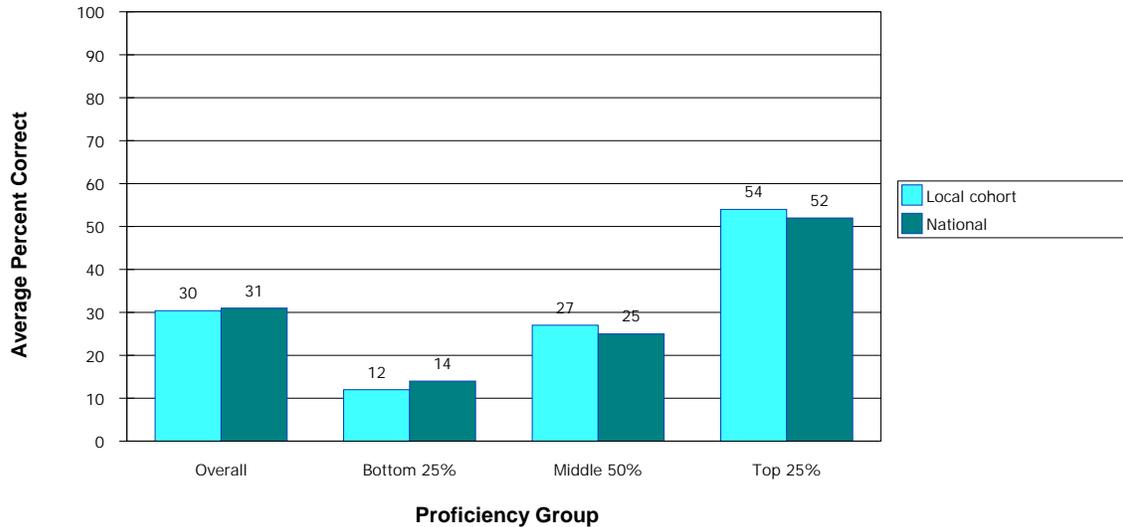
Interpretation Guide

The results in Figure M-4 are based on your students' responses to the Coordinate Geometry items on the CAAP Mathematics test. There are five items in this content category, constituting approximately 14% of the Mathematics test. These items focus on knowledge and skills that are considered a prerequisite for more advanced college mathematics courses (e.g., Graphing on the Real Number Line, Distance Formula in the Plane, Graphing Conics, Linear Equations in Two Variables, and Graphing Equations in the Plane).

Overall results and results for the bottom 25%, middle 50%, and top 25% of total CAAP Mathematics scores for the local and normative groups are provided. This is to enable you to compare bottom, middle, and top students in the local cohort to the bottom, middle, and top students in the normative group. Any differences less than 5%, between 5% and 10%, and greater than 10% are considered negligible, moderate, and substantial, respectively.

Mathematics Content Area: College Algebra

Figure M-5: Average Percent of Correct Answers in College Algebra



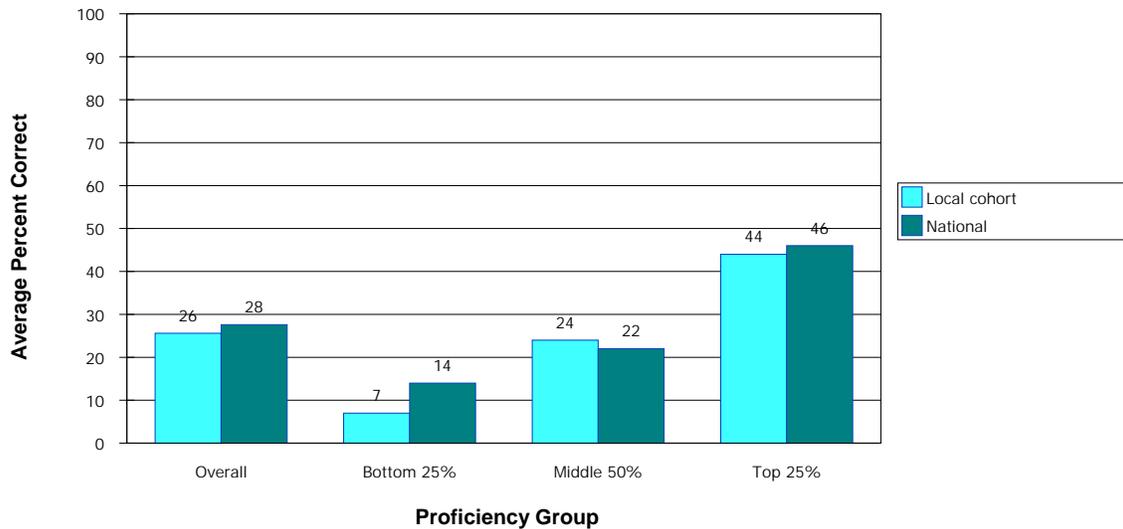
Interpretation Guide

The results in Figure M-5 are based on your students' responses to the College Algebra items on the CAAP Mathematics test. There are 14 items in this content category, constituting approximately 40% of the Mathematics test. These items focus on knowledge and skills that are considered important to mastery of Algebra at the college level (e.g., Exponents, Functions, Logarithmic Functions, Geometric Sequences & Series, Matrices, and Complex Numbers).

Overall results and results for the bottom 25%, middle 50%, and top 25% of total CAAP Mathematics scores for the local and normative groups are provided. This is to enable you to compare bottom, middle, and top students in the local cohort to the bottom, middle, and top students in the normative group. Any differences less than 5%, between 5% and 10%, and greater than 10% are considered negligible, moderate, and substantial, respectively.

Mathematics Content Area: Trigonometry

Figure M-6: Average Percent of Correct Answers in Trigonometry



Interpretation Guide

The results in Figure M-6 are based on your students' responses to the Trigonometry items on the CAAP Mathematics test. There are four items in this content category, constituting approximately 11% of the Mathematics test. These items focus on knowledge and skills that are considered important to mastery of Trigonometry at the college level (e.g., Trigonometric Equations and Inequalities, Trigonometric Functions and Identities, and Special Angles).

Overall results and results for the bottom 25%, middle 50%, and top 25% of total CAAP Mathematics scores for the local and normative groups are provided. This is to enable you to compare bottom, middle, and top students in the local cohort to the bottom, middle, and top students in the normative group. Any differences less than 5%, between 5% and 10%, and greater than 10% are considered negligible, moderate, and substantial, respectively.

Reading

The CAAP Reading Test is a 36-item test designed to measure reading comprehension as a combination of skills in two broad categories: (1) reasoning to determine implicit meaning and relationships, and (2) referring to what is explicitly stated in the text. The test assesses students' understanding of printed information using passages similar in content and complexity to those found in a postsecondary curriculum.

Executive Summary

This report contains results from CAAP Reading form 11-A. Valid scores were obtained for 171 students. Table R-1 below shows differences in percentages between the local and normative groups. Differences with magnitudes less than 5%, between 5% and 10%, and greater than 10% are considered negligible, moderate, and substantial, respectively. Negative differences indicate areas where local students had more difficulty with content category items than did the normative group, whereas positive differences indicate that local students found items easier than did the normative group.

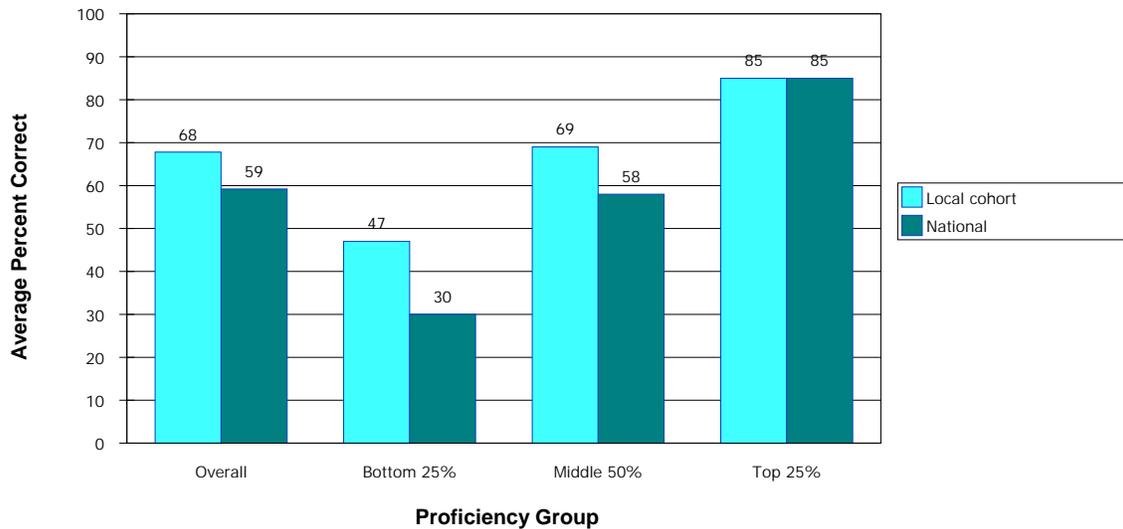
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Table R-1: Reading Comparison Highlights

Content Category	Local-Normative Group Differences in Percent Correct		
	Bottom 25%	Middle 50%	Top 25%
Reasoning Skills	17%	11%	0%
Referring Skills	14%	8%	1%

Reading Content Area: Reasoning Skills

Figure R-1: Average Percent of Correct Answers in Reasoning Skills



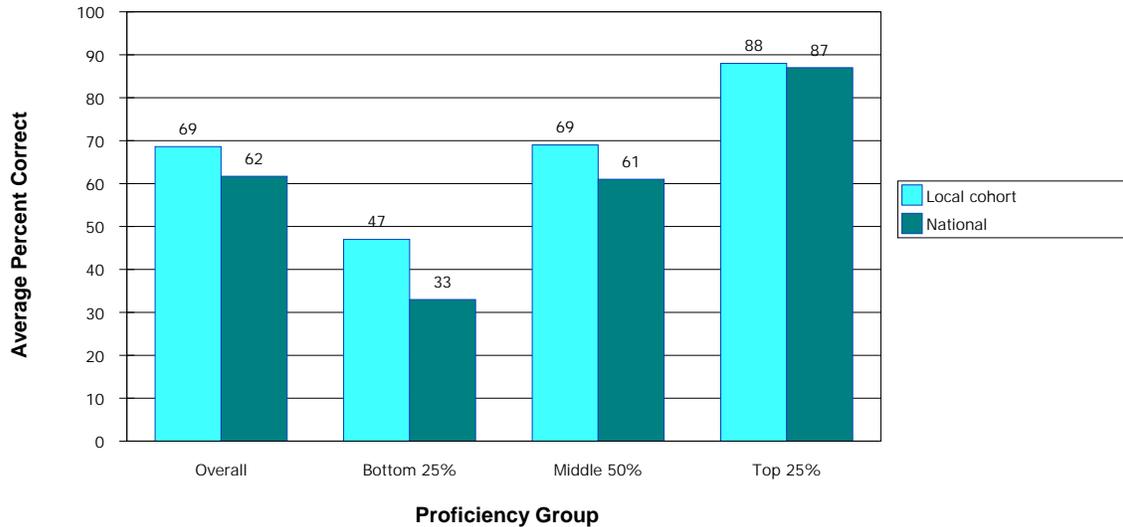
Interpretation Guide

The results in Figure R-1 are based on your students' responses to the Reasoning Skills items on the CAAP Reading test. There are 27 items in this content category, constituting approximately 75% of the Reading test. These items focus on knowledge and skills that are considered a prerequisite for more advanced college reading (e.g., Making Appropriate Inferences, Technique (of Author), Critical Understanding, and Applying Information).

Overall results and results for the bottom 25%, middle 50%, and top 25% of total CAAP Reading scores for the local and normative groups are provided. This is to enable you to compare bottom, middle, and top students in the local cohort to the bottom, middle, and top students in the normative group. Any differences less than 5%, between 5% and 10%, and greater than 10% are considered negligible, moderate, and substantial, respectively.

Reading Content Area: Referring Skills

Figure R-2: Average Percent of Correct Answers in Referring Skills



Interpretation Guide

The results in Figure R-2 are based on your students' responses to the Referring Skills items on the CAAP Reading test. There are nine items in this content category, constituting approximately 25% of the Reading test. These items focus on knowledge and skills that are considered a prerequisite for more advanced college reading (e.g., Identifying and Locating Specific Details, Recognizing and Understanding Explicitly Stated Relationships).

Overall results and results for the bottom 25%, middle 50%, and top 25% of total CAAP Reading scores for the local and normative groups are provided. This is to enable you to compare bottom, middle, and top students in the local cohort to the bottom, middle, and top students in the normative group. Any differences less than 5%, between 5% and 10%, and greater than 10% are considered negligible, moderate, and substantial, respectively.

Science

The CAAP Science Test is a 45-item test designed to measure students' knowledge and skills in science. The contents of the test are drawn from biological sciences (e.g., biology, botany, and zoology), chemistry, physics, and the physical sciences (e.g., geology, astronomy, and meteorology). The test emphasizes scientific knowledge and reasoning skills commonly encountered in a postsecondary science curriculum, rather than a high level of skill in mathematics or reading.

Executive Summary

This report contains results from CAAP Science form 11-A. Valid scores were obtained for 170 students. Table S-1 belows shows differences in percentages between the local and normative groups. Differences with magnitudes less than 5%, between 5% and 10%, and greater than 10% are considered negligible, moderate, and substantial, respectively. Negative differences indicate areas where local students had more difficulty with content category items than did the normative group, whereas positive differences indicate that local students found items easier than did the normative group.

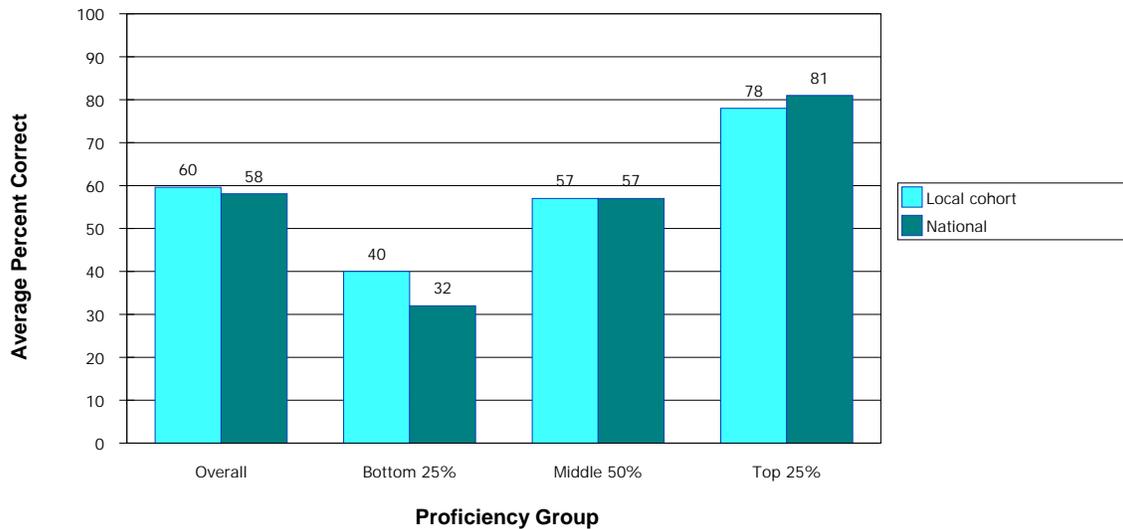
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Table S-1: Science Comparison Highlights

Content Category	Local-Normative Group Differences in Percent Correct		
	Bottom 25%	Middle 50%	Top 25%
Analysis	8%	0%	- 3%
Generalization	2%	- 3%	- 7%
Understanding	8%	1%	- 4%

Science Content Area: Analysis

Figure S-1: Average Percent of Correct Answers in Analysis



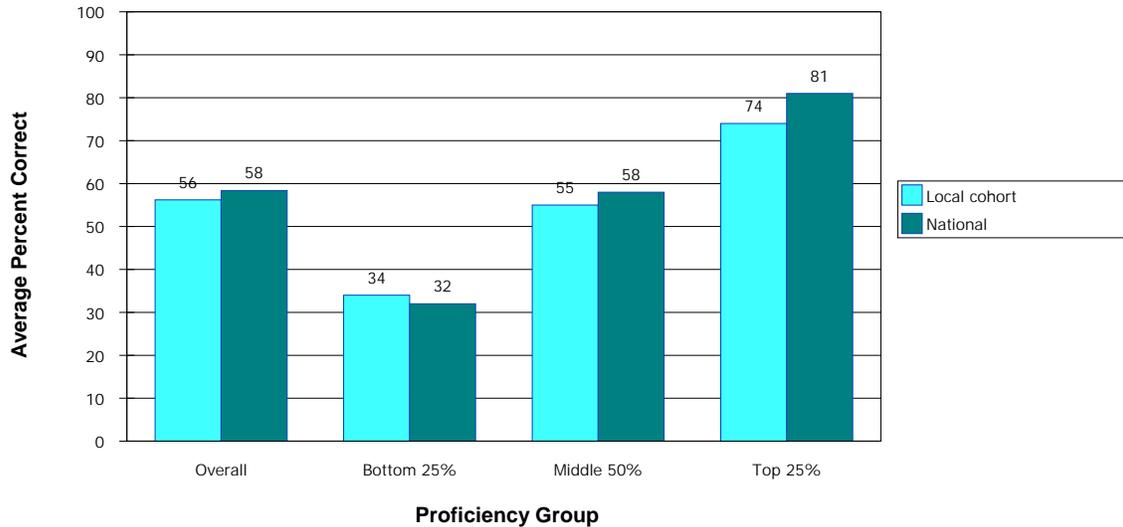
Interpretation Guide

The results in Figure S-1 are based on your students' responses to the Analysis items on the CAAP Science test. There are 23 items in this content category, constituting approximately 51% of the Science test. Items in this category assess students' ability to process information needed to formulate hypotheses and draw appropriate conclusions. These items also assess students' capabilities in evaluating scientific information to determine whether it supports a given hypothesis or conclusion. Students are also assessed regarding their ability to evaluate, compare, and contrast experimental designs or viewpoints, and to specify alternative ways of testing hypotheses.

Overall results and results for the bottom 25%, middle 50%, and top 25% of total CAAP Science scores for the local and normative groups are provided. This is to enable you to compare bottom, middle, and top students in the local cohort to the bottom, middle, and top students in the normative group. Any differences less than 5%, between 5% and 10%, and greater than 10% are considered negligible, moderate, and substantial, respectively.

Science Content Area: Generalization

Figure S-2: Average Percent of Correct Answers in Generalization



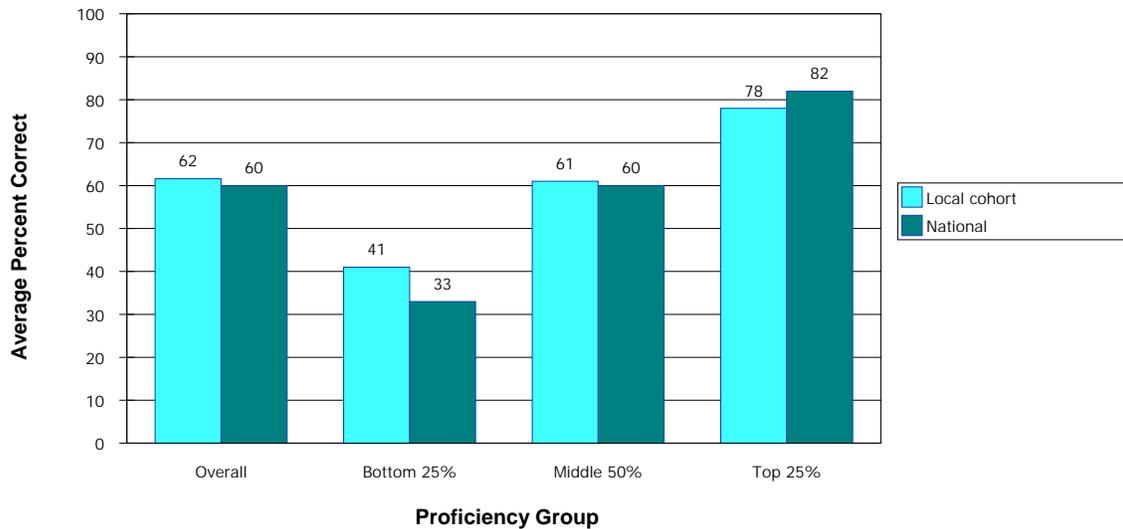
Interpretation Guide

The results in Figure S-2 are based on your students' responses to the Generalization items on the CAAP Science test. There are twelve items in this content category, constituting approximately 27% of the Science test. These items assess students' ability to extend given information to a broader or different context, to generate models that are consistent with given information, and to develop new procedures to gain additional information. Also tested is their ability to go beyond given information to predict outcomes based on that information.

Overall results and results for the bottom 25%, middle 50%, and top 25% of total CAAP Science scores for the local and normative groups are provided. This is to enable you to compare bottom, middle, and top students in the local cohort to the bottom, middle, and top students in the normative group. Any differences less than 5%, between 5% and 10%, and greater than 10% are considered negligible, moderate, and substantial, respectively.

Science Content Area: Understanding

Figure S-3: Average Percent of Correct Answers in Understanding



Interpretation Guide

The results in Figure S-3 are based on your students' responses to the Understanding items on the CAAP Science test. There are ten items in this content category, constituting approximately 22% of the Science test. Items in this category assess students' knowledge and skills relevant to their understanding of scientific concepts and assumptions, and their ability to identify and evaluate components of an experimental design or process. Also tested are students' abilities to identify and evaluate data presented in graphs, figures, or tables, and to translate given data into alternate forms.

Overall results and results for the bottom 25%, middle 50%, and top 25% of total CAAP Science scores for the local and normative groups are provided. This is to enable you to compare bottom, middle, and top students in the local cohort to the bottom, middle, and top students in the normative group. Any differences less than 5%, between 5% and 10%, and greater than 10% are considered negligible, moderate, and substantial, respectively.

Critical Thinking

The CAAP Critical Thinking Test is a 32-item test that measures students' skills in analyzing, evaluating, and extending arguments. An argument is defined as a sequence of statements that includes a claim that one of the statements, the conclusion, follows from the other statements. The test presents arguments using a variety of formats, including case studies, debates, dialogues, overlapping positions, statistical arguments, experimental results, and editorials. Arguments are embedded in issues that are likely to be encountered in a postsecondary curriculum.

Executive Summary

This report contains results from CAAP Critical Thinking form 11-A. Valid scores were obtained for 166 students. Table C-1 belows shows differences in percentages between the local and normative groups. Differences with magnitudes less than 5%, between 5% and 10%, and greater than 10% are considered negligible, moderate, and substantial, respectively. Negative differences indicate areas where local students had more difficulty with content category items than did the normative group, whereas positive differences indicate that local students found items easier than did the normative group.

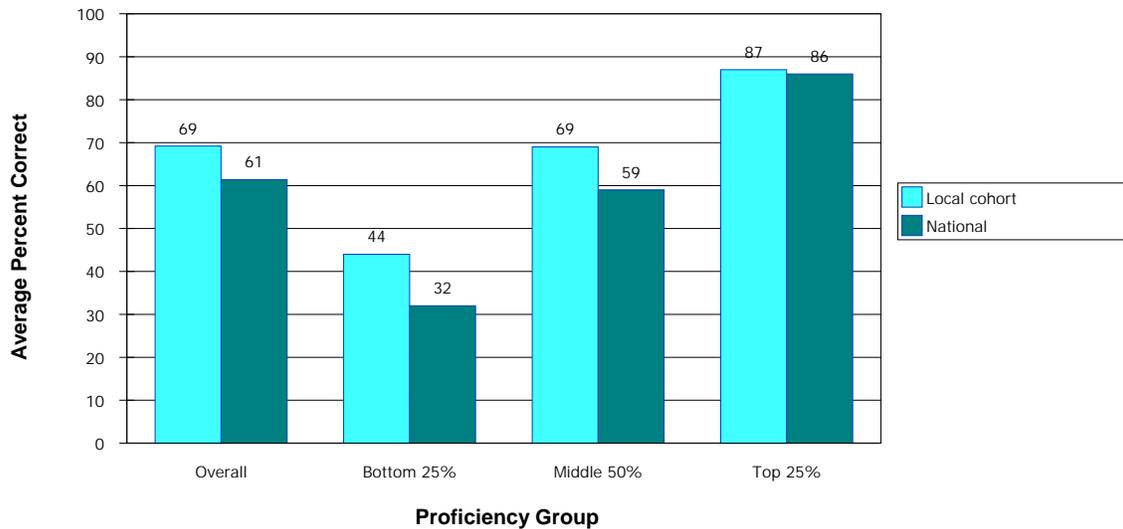
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Table C-1: Critical Thinking Comparison Highlights

Content Category	Local-Normative Group Differences in Percent Correct		
	Bottom 25%	Middle 50%	Top 25%
Analysis of Arguments	12%	10%	1%
Evaluation of Arguments	6%	8%	- 5%
Extension of Arguments	11%	7%	- 1%

Critical Thinking Content Area: Analysis of Arguments

Figure C-1: Average Percent of Correct Answers in Analysis of Arguments



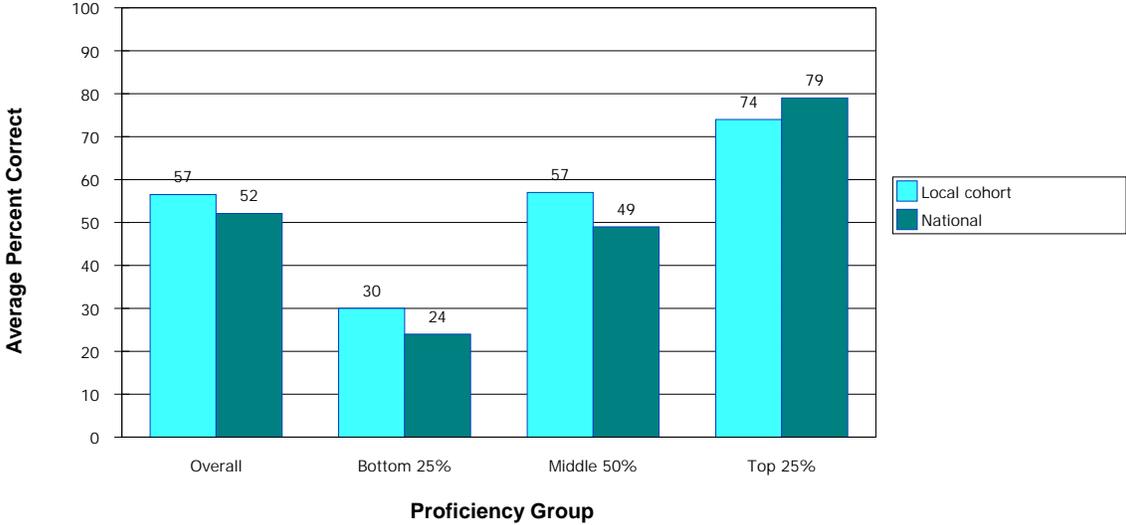
Interpretation Guide

The results in Figure C-1 are based on your students' responses to the Analysis of Arguments items on the CAAP Critical Thinking test. There are 21 items in this content category, constituting approximately 66% of the Critical Thinking test. Items in this category assess the students' ability to identify essential elements of an argument, including hypotheses, premises, and conclusions, and also their ability to identify logical fallacies, exaggerated claims, unstated assumptions, analogies, and multiple points of view. Students are also tested regarding their ability to analyze the structure of arguments, including their ability to distinguish between statements of fact and opinion, to make judgments about equivalent and nonequivalent statements, and to recognize inductive and deductive arguments and supported and unsupported claims. Also tested is students' ability to recognize patterns and sequences of arguments, including their ability to see relationships of premises, subarguments, and subconclusions to the overall argument.

Overall results and results for the bottom 25%, middle 50%, and top 25% of total CAAP Critical Thinking scores for the local and normative groups are provided. This is to enable you to compare bottom, middle, and top students in the local cohort to the bottom, middle, and top students in the normative group. Any differences less than 5%, between 5% and 10%, and greater than 10% are considered negligible, moderate, and substantial, respectively.

Critical Thinking Content Area: Evaluation of Arguments

Figure C-2: Average Percent of Correct Answers in Evaluation of Arguments



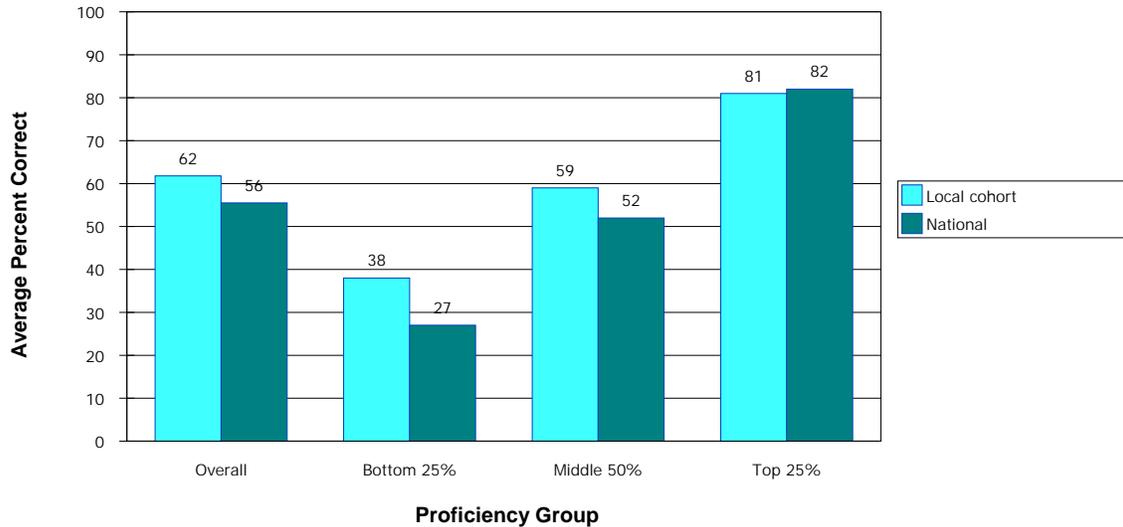
Interpretation Guide

The results in Figure C-2 are based on your students' responses to the Evaluation of Arguments items on the CAAP Critical Thinking test. There are five items in this content category, constituting approximately 16% of the Critical Thinking test. Items in this category assess the students' ability to evaluate information on the basis of its consistency, relevance, and accuracy, and to make judgments about its sufficiency. In addition, students are assessed in their ability to evaluate replies to arguments on the basis of their intent, appropriateness, and strength.

Overall results and results for the bottom 25%, middle 50%, and top 25% of total CAAP Critical Thinking scores for the local and normative groups are provided. This is to enable you to compare bottom, middle, and top students in the local cohort to the bottom, middle, and top students in the normative group. Any differences less than 5%, between 5% and 10%, and greater than 10% are considered negligible, moderate, and substantial, respectively.

Critical Thinking Content Area: Extension of Arguments

Figure C-3: Average Percent of Correct Answers in Extension of Arguments



Interpretation Guide

The results in Figure C-3 are based on your students' responses to the Extension of Arguments items on the CAAP Critical Thinking test. There are six items in this content category, constituting approximately 19% of the Critical Thinking test. Items in this category assess students' skills in using given premises to reach related conclusions and in recognizing the scope of application of arguments. Students' ability to develop or recognize arguments that are based on analogies is also assessed. Some items in this category also assess students' understanding of how modifications to an argument can strengthen or weaken the argument or resolve conflicts within the argument.

Overall results and results for the bottom 25%, middle 50%, and top 25% of total CAAP Critical Thinking scores for the local and normative groups are provided. This is to enable you to compare bottom, middle, and top students in the local cohort to the bottom, middle, and top students in the normative group. Any differences less than 5%, between 5% and 10%, and greater than 10% are considered negligible, moderate, and substantial, respectively.