

South Dakota Sch of Mines/tech

**ACT Institution Code: 3922** 

Rapid City, SD July 2013



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### Introduction

## **Overview**

This report contains results for your students who tested with both the ACT and CAAP (your matched students). Your matched students' progress is compared to all recently-tested students whose scores on the ACT and CAAP tests have been matched (reference group). Due to normal group variability, performance of your matched students should be tracked over multiple years.

Information is provided about the growth of your students' general education cognitive skills between the times they tested with the ACT and CAAP. Because the content specifications of four pairs of tests from the ACT and CAAP are similar, it is possible to track student performance for your matched students. Similar test pairs include:

- ► The ACT English test CAAP Writing Skills test
- ► The ACT Reading test CAAP Reading test

- ► The ACT Mathematics test CAAP Mathematics test
- ► The ACT Science test CAAP Science test

Note: The CAAP Writing Essay and Critical Thinking modules are not linked to any ACT tests.

### Interpreting your linkage report

For each set of ACT/CAAP tests linked in this report, you will find the following figures and tables.

Figure 1 indicates the percent of your matched students' ACT scores falling into each reference group ACT quartile range.

Figure 2 indicates the percent of your matched students' CAAP scores falling into each reference group CAAP quartile range.

<u>Table 1</u> contains the number and percent of your matched students falling into the joint ACT and CAAP quartile ranges that were established using reference group results.

<u>Table 2</u> presents frequencies, means, and standard deviations that describe the performance of your students and the reference group on the ACT and CAAP.

## How are the reference groups and quartile ranges identified?

The reference group information uses all matched student records within 2- or 4-year institutions aggregated across the most recent three years to promote stability in normative results. This aggregated information is then analyzed such that student scores fall into the bottom, second, third, or top quarter on the ACT and CAAP. These groups are referred to as "quartile ranges".

## Important facts to note

- ► CAAP modules require greater knowledge and more complex cognitive skills than the ACT tests. Therefore, students that have maintained their quartile range or progressed into a higher range from the ACT to CAAP have increased their knowledge and cognitive skills.
- ▶It is very difficult for students in the top ACT quartile range to progress because they literally have nowhere to go except to remain at an equivalent level or go down on CAAP. Similarly, it is impossible for students in the bottom ACT quartile range to demonstrate a decrease in performance because they have nowhere to go except remain at an equivalent level or go up on CAAP. Students near the middle of the score scale can either increase or decrease quartile ranges.
- ▶ Suggestions are made in the sections labeled 'What to Look For' and 'What to Do'. These are intended to begin the process of interpreting your results and identifying potential solutions and are not the only options to consider.
- ►The data contained in this report are based on those students from your institution who were identified as taking <u>both</u> the ACT and CAAP. These students may not be typical of all students from your institution. Please use caution if you wish to generalize these results to your entire student body.

# **EXECUTIVE SUMMARY** 1,2

#### **ENGLISH/WRITING SKILLS**

- 60% of students from your institution were in the same quartile range on CAAP as they were on the ACT.
- 28% of students from your institution were in a lower quartile range on CAAP than they were on the ACT.
- 13% of students from your institution were in a higher quartile range on CAAP than they were on the ACT.

N = 332

#### **MATHEMATICS**

- 76% of students from your institution were in the same quartile range on CAAP as they were on the ACT.
- 6% of students from your institution were in a lower quartile range on CAAP than they were on the ACT.
- 18% of students from your institution were in a higher quartile range on CAAP than they were on the ACT.

N = 332

#### READING

- 56% of students from your institution were in the same quartile range on CAAP as they were on the ACT.
- 25% of students from your institution were in a lower quartile range on CAAP than they were on the ACT.
- 18% of students from your institution were in a higher quartile range on CAAP than they were on the ACT.

N = 332

#### **SCIENCE**

- 71% of students from your institution were in the same quartile range on CAAP as they were on the ACT.
- 12% of students from your institution were in a lower quartile range on CAAP than they were on the ACT.
- 17% of students from your institution were in a higher quartile range on CAAP than they were on the ACT.

N = 332

Note: . indicates no test data available.

<sup>&</sup>lt;sup>1</sup> %'s may not add up to 100% because of rounding.

<sup>&</sup>lt;sup>2</sup> Due to small sample sizes, results for tests where N<25 should be interpreted with caution.

# ACT ENGLISH AND CAAP WRITING SKILLS 1,2

The ACT English and CAAP Writing Skills tests measure students' understanding of the conventions of standard written English in punctuation, grammar, sentence structure, strategy, organization, and style.

#### **EXECUTIVE SUMMARY**

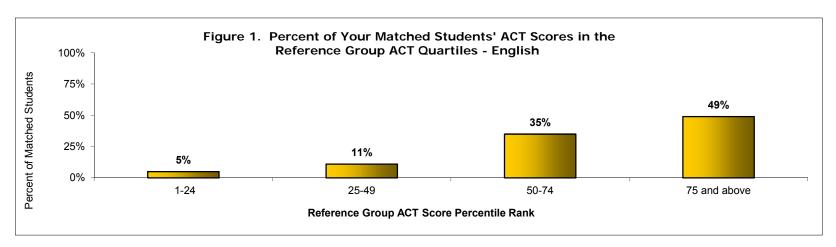
- ▶ 60% of students from your institution were in the same quartile range on CAAP as they were on the ACT.
- ▶ 28% of students from your institution were in a lower quartile range on CAAP than they were on the ACT.
- ▶ 13% of students from your institution were in a higher quartile range on CAAP than they were on the ACT.

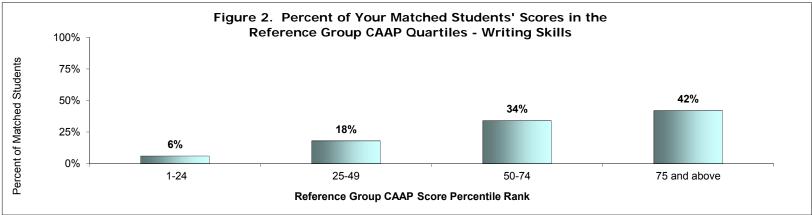
<sup>&</sup>lt;sup>1</sup> Throughout this section, %'s may not add up to 100% or to the sum of subgroup percents because of rounding.

<sup>&</sup>lt;sup>2</sup> Due to small sample sizes, results for tests where N<25 should be interpreted with caution.

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## Performance of Your ACT/CAAP Matched Students in ACT English and CAAP Writing Skills Quartiles





#### What to Look For:

- \*Within a given ACT or CAAP quartile range, how does the percentage of your matched students compare to the 25% in each of the reference group quartiles?
- \*On the ACT and CAAP, does your institution have a higher percentage of your matched students in the upper or lower quartiles?
- \*What changes occurred between the ACT and CAAP testings?

- \*Verify that your institution offers all the necessary English/writing skills courses for students to advance.
- \*Review your curricula to determine if your courses are rigorous.
- \*Determine if your English/writing skills curricula include, but are not necessarily limited to, instruction on punctuation, grammar and usage, sentence structure, strategy, organization, and style.

ACT Institution Code: 3922

## Performance of Your ACT/CAAP Matched Students Across ACT English and CAAP Writing Skills Quartiles

Table 1. Percent of Your Matched Students in ACT Quartiles Across CAAP Quartiles												
	Totals	across	CAAP Writing Skills Score Percentile Rank									
ACT English	Quai	rtiles		1-24	2	25-49		0-74	75 and above			
Score Percentile Rank	N	%	N	%	N	%	N	%	N	%		
1-24	15	5%	9	3%	5	2%	1	0%	0	0%		
25-49	36	11%	6	2%	20	6%	8	2%	2	1%		
50-74	117	35%	5	2%	28	8%	58	17%	26	8%		
75 and above	164	49%	0	0%	6	2%	47	14%	111	33%		
Totals across Quartiles	332		20	6%	59	18%	114	34%	139	42%		

Table 1 enables you to compare the percentage of your students falling into each of the ACT reference group quartiles, while tracking whether students either remained in the same, progressed to the next, or fell to a lower reference group quartile range on CAAP. The highlighted diagonal displays those students who remained in the same reference group quartile on CAAP as on the ACT. Those above the diagonal progressed to a higher quartile range on CAAP, and those below the highlighted diagonal fell to a lower quartile.

For example, look at the column for the second quartile for CAAP Writing Skills (Percentile Rank 25-49); 18% of your students scored in this quartile on the CAAP Writing Skills test. Of those 18%, 2% of your students scored in the first quartile, 6% scored in the second quartile, 8% scored in the third quartile, and 2% scored in the fourth quartile on the ACT English test. Compared to the ACT, 6% scored in the same quartile on CAAP where 2% increased from the first quartile on the ACT to the second quartile on CAAP, and 10% dropped from higher quartiles on The ACT to the second quartile on CAAP.

Ideally, you would like to see most of your students either maintaining or progressing into higher quartile ranges on CAAP than on the ACT as this indicates greater growth than exhibited by the reference group.

#### What to Look for:

- \*Do you consistently have more students scoring in higher quartile ranges on CAAP than they scored on the ACT?
- \*What percentage of your matched students in the first quartile on the ACT progressed to higher quartiles on CAAP?
- \*Across quartiles on the ACT, are more of your matched students in higher or lower quartiles on CAAP?
- \*Is the percentage of your matched students in the top ACT quartile equal to the percentage of your matched students in the top quartile on CAAP?

- \*Determine if your matched students have taken all the necessary coursework between the ACT and CAAP testings to maintain or improve their quartile ranking.
- \*Encourage every student to take <u>all</u> the necessary general education coursework necessary for success.
- \*Look at the motivation levels of your students to infer if most students gave their best effort on CAAP. (See the CAAP Institutional Summary Report for motivation information.)

## Performance of Your ACT/CAAP Matched Students on the ACT English and CAAP Writing Skills

Table 2. Frequencies, Means, and Standard Deviations for Your Matched Students Compared to the Reference Group on the ACT and CAAP

ACT E	nglish			CAAP Writing Skills				
	<u>N</u>	<u>Mean</u>	<u>S.D.</u>		<u>N</u>	<u>Mean</u>	<u>S.D.</u>	
Reference Group:	9,892	21.7	5.4	Reference Group:	9,892	64.4	4.6	
Your Matched Students:	332	24.9	4.5	Your Matched Students:	332	66.6	3.3	

#### What to Look For:

- \*Is the ACT English mean for your matched students greater or less than the mean for the reference group on the ACT English test?
- \*Is the CAAP Writing Skills mean for your matched students greater or less than the mean for the reference group on the CAAP Writing Skills?

#### What to Do:

- \*Determine if your matched students need more rigorous English-related instruction.
- \*Refer to your CAAP Institutional Summary Report to examine the descriptive statistics for your entire CAAP-tested population and for subgroups (e.g., age, ethnicity, gender).

## Your ACT/CAAP Linkage Report

This report should be used as one piece of information in assessing the progress and status of your matched students. The accuracy of overall student progress and status reflected in this report is dependent on the quality of your sample.

When reviewing this report consider the following:

- \*Are the students in this report a representative sample of all students at your institution?
- \*Do you need to include more students in your next CAAP testing to obtain a better sample?

#### Additional Information to Review

- \*The CAAP Institutional Summary Report
- \*The CAAP Content Analysis Report
- \*Student Grades/GPA in their English/writing courses
- \*The number and rigor of English/writing courses taken
- \*Other student information (e.g., student major, full time, part time, motivation, etc.)

# ACT AND CAAP READING 1,2

Based on selections of prose fiction that are representative of material commonly encountered in college curricula, ACT and CAAP Reading tests measure students' reading comprehension by requiring students to derive meaning, make comparisons and generalizations, manipulate information, and draw conclusions.

### **EXECUTIVE SUMMARY**

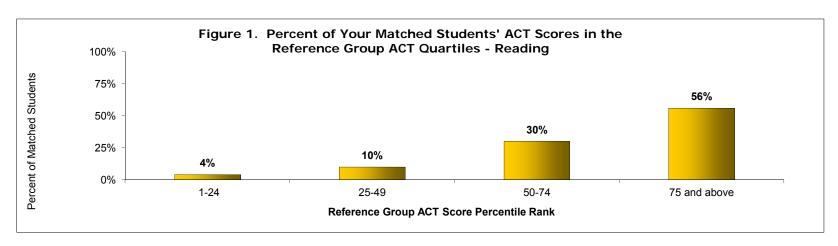
- ▶ 56% of students from your institution were in the same quartile range on CAAP as they were on the ACT.
- **▶** 25% of students from your institution were in a lower quartile range on CAAP than they were on the ACT.
- ▶ 18% of students from your institution were in a higher quartile range on CAAP than they were on the ACT.

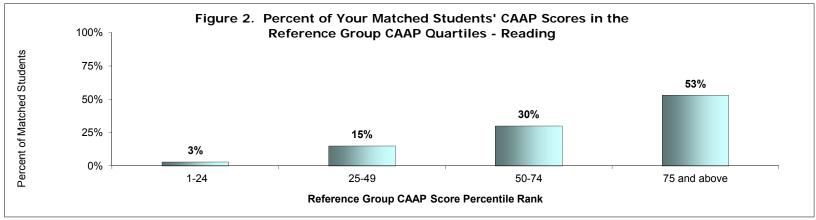
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<sup>&</sup>lt;sup>2</sup> Due to small sample sizes, results for tests where N<25 should be interpreted with caution.

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# Performance of Your ACT/CAAP Matched Students in ACT and CAAP Reading Quartiles





#### What to Look For:

- \*Within a given ACT/CAAP quartile range, how does the percentage of your matched students compare to the 25% in each of the reference group quartiles?
- \*On the ACT and CAAP, does your institution have a higher percentage of your matched students in the upper or lower quartiles?
- \*What changes occurred between the ACT and CAAP testings?

- \*Verify your institution offers all the necessary reading-related courses for students to advance.
- \*Review your curricula to determine if your courses are rigorous.
- \*Determine if your reading-related curricula include, but are not necessarily limited to, instruction on deriving meaning, manipulating information, making comparisons and generalizations, and drawing conclusions.

## Performance of Your ACT/CAAP Matched Students Across ACT/CAAP Reading Quartiles

Table 1. Percent of Your Matched Students in ACT Quartiles Across CAAP Quartiles												
	Totals	across	CAAP Reading Score Percentile Rank									
ACT Reading	Quai	rtiles		1-24	2	25-49		0-74	75 and above			
Score Percentile Rank	N	%	N	%	N	%	N	%	N	%		
1-24	13	4%	1	0%	8	2%	4	1%	0	0%		
25-49	33	10%	5	2%	10	3%	7	2%	11	3%		
50-74	99	30%	3	1%	22	7%	43	13%	31	9%		
75 and above	187	56%	0	0%	9	3%	45	14%	133	40%		
Totals across Quartiles	332		9	3%	49	15%	99	30%	175	53%		

Table 1 enables you to compare the percentage of your students falling into each of the ACT reference group quartiles, while tracking whether students either remained in the same, progressed to the next, or fell to a lower reference group quartile range on CAAP. The highlighted diagonal displays those students who remained in the same reference group quartile on CAAP as on the ACT. Those above the diagonal progressed to a higher quartile range on CAAP and those below the highlighted diagonal fell into a lower quartile.

For example, look at the column for the second quartile for CAAP Reading (Percentile Rank 25-49); 15% of your students scored in this quartile on the CAAP Reading test. Of those 15%, 2% of your students scored in the first quartile, 3% scored in the second quartile, 7% scored in the third quartile, and 3% scored in the fourth quartile on the ACT Reading test. Compared to the ACT, 3% scored in the same quartile on CAAP where 2% increased from the first quartile on the ACT to the second quartile on CAAP, and 10% dropped from higher quartiles on the ACT to the second quartile on CAAP.

Ideally, you would like to see most of your students either maintaining or progressing into higher quartile ranges on CAAP than on the ACT as this indicates greater growth than exhibited by the reference group.

#### What to Look for:

- \*Do you consistently have more students scoring in higher quartile ranges on CAAP than they scored on the ACT?
- \*What percentage of your matched students in the first quartile on the ACT progressed to higher quartiles on CAAP?
- \*Across quartiles on the ACT, are more of your matched students in higher or lower quartiles on CAAP?
- \*Is the percentage of your matched students in the top ACT quartile equal to the percentage of your matched students in the top quartile on CAAP?

- \*Determine if your matched students have taken all the necessary coursework between the ACT and CAAP testings to maintain or improve their quartile ranking.
- \*Encourage every student to take  $\underline{all}$  the general education coursework necessary for success.
- \*Look at the motivation levels of your students to infer if most students gave their best effort on CAAP. (See the CAAP Instiitutional Summary Report for information on motivation.)

## Performance of Your ACT/CAAP Matched Students in ACT and CAAP Reading

Table 2. Frequencies, Means, and Standard Deviations for Your Matched Students Compared to the Reference Group on ACT and CAAP

ACT Re	ading			CAAP R	eading		
	<u>N</u>	<u>Mean</u>	<u>S.D.</u>		<u>N</u>	<u>Mean</u>	<u>S.D.</u>
Reference Group:	8,974	22.2	5.6	Reference Group:	8,974	62.3	5.3
Your Matched Students:	332	26.4	4.7	Your Matched Students:	332	65.7	4.1

#### What to Look For:

\*Is the ACT Reading mean for Your Matched Students greater or less than the ACT Reading mean for the Reference Group?

\*Is the CAAP Reading mean for Your Matched Students greater or less than the CAAP Reading mean for the Reference Group?

#### What to Do:

\*Determine if your matched students need more rigorous reading-related instruction.

\*Refer to your CAAP Institutional Summary Report to examine the descriptive statistics for your entire CAAP-tested population and for subgroups (e.g., age, ethnicity, gender).

## Your ACT/CAAP Linkage Report

This report should be used as one piece of information in assessing the progress and status of your matched students. The accuracy of overall student status and progress reflected in this report is based on the quality of your sample.

When reviewing this report consider the following:

- \*Are the students in this report a representative sample of all students at your institution?
- \*Do you need to include more students in your next CAAP testing to obtain a better sample?

#### Additional Information to Review

- \*The CAAP Institutional Summary Report
- \*The CAAP Content Analysis Report
- \*Student Grades/GPA in their reading-intensive courses
- \*The number and rigor of reading-related courses taken by the students who took CAAP
- \*Other student information (e.g., student major, full time, part time, motivation, etc.)

# ACT AND CAAP MATHEMATICS 1,2

Based on mathematical problems encountered in many postsecondary curricula, The ACT and CAAP Mathematics tests measure students' proficiency in mathematical reasoning.

## **EXECUTIVE SUMMARY**

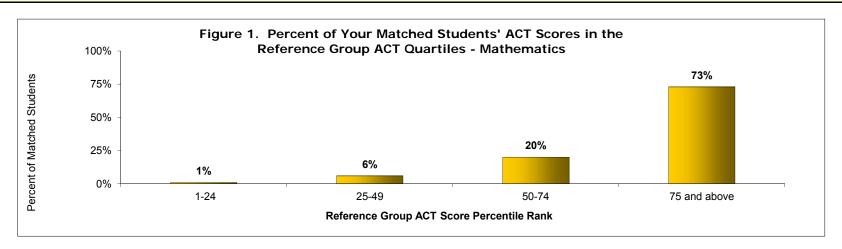
- ▶ 76% of students from your institution were in the same quartile range on CAAP as they were on the ACT.
- ▶ 6% of students from your institution were in a lower quartile range on CAAP than they were on the ACT.
- ▶ 18% of students from your institution were in a higher quartile range on CAAP than they were on the ACT.

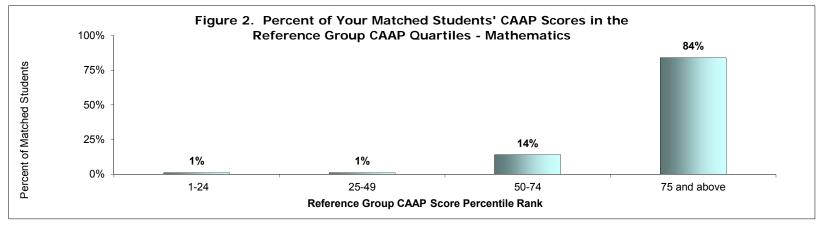
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<sup>&</sup>lt;sup>2</sup> Due to small sample sizes, results for tests where N<25 should be interpreted with caution.

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## Performance of Your ACT/CAAP Matched Students in ACT and CAAP Mathematics





#### What to Look For:

- \*Within a given ACT or CAAP quartile range, how does the percentage of your matched students compare to the 25% in each of the reference group quartiles?
- \*On the ACT and CAAP, does your institution have a higher percentage of your matched students in the upper or lower quartiles?
- \*What changes occurred between the ACT and CAAP testings?

- \*Verify that your institution offers all the appropriate mathematics-related courses for students to advance.
- \*Review your curricula to determine if your courses are rigorous.
- \*Determine if your curricula include, but are not necessarily limited to, instruction in Prealgebra, Elementary Algebra, Intermediate Algebra, Coordinate Geometry, College Algebra, and Trigonometry.

## Performance of Your ACT/CAAP Matched Students Across ACT/CAAP Mathematics Quartiles

Table 1. Percent of Your Matched Students in ACT Quartiles Across CAAP Quartiles												
	Totals	across	CAAP Mathematics Score Percentile Rank									
ACT Mathematics	Quai	rtiles		1-24	2	5-49	5	0-74	75 an	d above		
Score Percentile Rank	N	%	N	%	N	%	N	%	N	%		
1-24	2	1%	1	0%	1	0%	0	0%	0	0%		
25-49	19	6%	1	0%	0	0%	6	2%	12	4%		
50-74	68	20%	0	0%	2	1%	24	7%	42	13%		
75 and above	243	73%	0	0%	0	0%	17	5%	226	68%		
Totals across Quartiles	332		2	1%	3	1%	47	14%	280	84%		

Table 1 enables you to compare the percentage of your students falling into each of the ACT quartiles, while tracking whether students either remained in the same quartile range, progressed into the next quartile range, or fell to a lower quartile range on CAAP. The highlighted diagonal displays those students who remained in the same quartile on CAAP as on the ACT. Those above the diagonal progressed to a higher quartile on CAAP and those below the highlighted diagonal fell to a lower quartile on CAAP.

For example, look at the column for the second quartile for CAAP Mathematics (Percentile Rank 25-49); 1% of your students scored in this quartile on the CAAP Mathematics test. Of those 1%, 0% of your students scored in the first quartile, 0% scored in the second quartile, 1% scored in the third quartile, and 0% scored in the fourth quartile on the ACT Mathematics test. Compared to the ACT, 0% scored in the same quartile on CAAP where 0% increased from the first quartile on the ACT to the second quartile on CAAP, and 1% dropped from higher quartiles on the ACT to the second quartile on CAAP.

Ideally, you would like to see most of your students either maintaining or progressing into higher quartile ranges on CAAP than on the ACT as this indicates greater growth than exhibited by the reference group.

#### What to Look for:

- \*Do you consistently have more students scoring in higher quartile ranges on CAAP than they scored on the ACT?
- \*What percentage of your matched students in the first quartile on the ACT progressed to higher quartiles on CAAP?
- \*Across quartiles on the ACT, are more of your matched students in higher or lower quartiles on CAAP?
- \*Is the percentage of your matched students in the top ACT quartile equal to the percentage of your matched students in the top quartile on CAAP?

- \*Determine if students have taken all the necessary coursework between the ACT and CAAP testings to maintain or improve their quartile ranking.
- \*Encourage every student to take <u>all</u> the necessary general education coursework.
- \*Look at the motivation levels of your students to infer if most students gave their best effort on CAAP. (See the CAAP Institutional Summary Report for motivation information.)

## Performance of Your ACT/CAAP Matched Students in ACT and CAAP Mathematics

Table 2. Frequencies, Means, and Standard Deviations for Your Matched Students Compared to the Reference Group on The ACT and CAAP

ACT Math	ematics			CAAP Mathematics				
	<u>N</u>	<u>Mean</u>	<u>S.D.</u>		<u>N</u>	<u>Mean</u>	<u>S.D.</u>	
Reference Group:	8,691	21.6	4.6	Reference Group:	8,691	58.4	4.0	
Your Matched Students:	332	26.8	4.0	Your Matched Students:	332	64.0	3.3	

#### What to Look For:

- \*Is the ACT Mathematics mean for Your Matched Students greater or less than the ACT Mathematics mean for the Reference Group?
- \*Is the CAAP Mathematics mean for Your Matched Students greater or less than the CAAP Mathematics mean for the Reference Group?

#### What to Do:

- \*Determine if your matched students need more rigorous mathematics-related instruction.
- \*Refer to your CAAP Institutional Summary Report to examine the descriptive statistics for your entire CAAP-tested population and for subgroups (e.g., age, ethnicity, gender).

## Your ACT/CAAP Linkage Report

This report should be used as one piece of information in assessing the progress and status of your matched students. The accuracy of overall student status and progress reflected in this report is based on the quality of your sample.

When reviewing this report consider the following:

- \*Are the students in this report a representative sample of all students at your institution?
- \*Do you need to include more students in your next CAAP testing to obtain a better sample?

### **Additional Information to Review**

- \*The CAAP Institutional Summary Report
- \*The CAAP Content Analysis Report
- \*Student Grades/GPA in their mathematics courses
- \*The number and rigor of math-related courses taken by the students who took CAAP
- \*Other student information (e.g., student major, full time, part time, motivation, etc.)

# ACT AND CAAP SCIENCE 1,2

Based on science problems encountered in many postsecondary curricula, The ACT and CAAP Science tests measure students' proficiency in scientific reasoning.

### **EXECUTIVE SUMMARY**

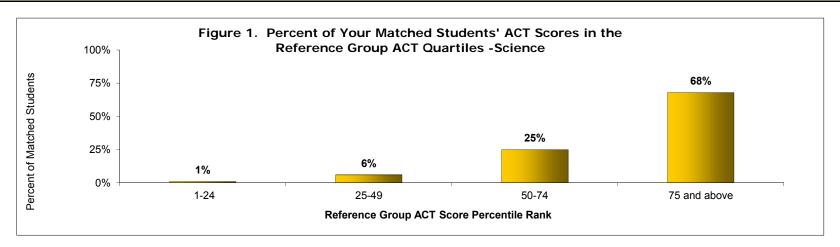
- 71% of students from your institution were in the same quartile range on CAAP as they were on the ACT.
- ▶ 12% of students from your institution were in a lower quartile range on CAAP than they were on the ACT.
- ▶ 17% of students from your institution were in a higher quartile range on CAAP than they were on the ACT.

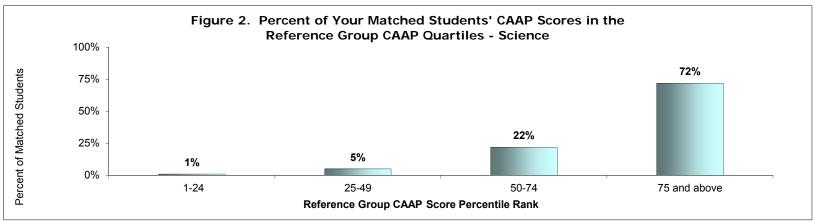
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<sup>&</sup>lt;sup>2</sup> Due to small sample sizes, results for tests where N<25 should be interpreted with caution.

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## Performance of Your ACT/CAAP Matched Students in ACT and CAAP Science





#### What to Look For:

- \*Within a given ACT or CAAP quartile range, how does the percentage of your matched students compare to the 25% in each of the reference group quartiles?
- \*On the ACT and CAAP, does your institution have a higher percentage of your matched students in the upper or lower quartiles?
- \*What changes occurred between the ACT and CAAP testings?

- \*Verify that your institution offers all the appropriate science-related courses for students to advance.
- \*Review your curricula to determine if your courses are rigorous.
- \*Determine if your curricula include, but are not necessarily limited to, instruction in the interpretation of data, scientific investigation, and the evaluation of models, inferences, and experimental results.

## Performance of Your ACT/CAAP Matched Students Across ACT/CAAP Science Quartiles

Table 1. Perce	Table 1. Percent of Your Matched Students in ACT Quartiles Across CAAP Quartiles												
	Totals	across	CAAP Science Score Percentile Rank										
ACT Science	Quai	rtiles		1-24	2!	5-49	5	0-74	75 an	75 and above			
Score Percentile Rank	N	%	N	%	N	%	N	%	N	%			
1-24	4	1%	1	0%	2	1%	1	0%	0	0%			
25-49	20	6%	2	1%	2	1%	10	3%	6	2%			
50-74	82	25%	0	0%	8	2%	36	11%	38	11%			
75 and above	226	68%	0	0%	3	1%	27	8%	196	59%			
Totals across Quartiles	332		3	1%	15	5%	74	22%	240	72%			

Table 1 enables you to compare the percentage of your students falling into each of the ACT quartiles, while tracking whether students either remained in the same quartile range, progressed into the next quartile range, or fell to a lower quartile range on CAAP. The highlighted diagonal displays those students who remained in the same reference group quartile on CAAP as on the ACT. Those above the diagonal progressed to a higher quartile range on CAAP and those below the highlighted diagonal fell into a lower quartile.

For example, look at the column for the second quartile for CAAP Science (Percentile Rank 25-49); 5% of your students scored in this quartile on the CAAP Science test. Of those 5%, 1% of your students scored in the first quartile, 1% scored in the second quartile, 2% scored in the third quartile, and 1% scored in the fourth quartile on the ACT Science test. Compared to the ACT, 1% scored in the same quartile on CAAP where 1% increased from the first quartile on the ACT to the second quartile on CAAP, and 3% dropped from higher quartiles on the ACT to the second quartile on CAAP.

Ideally, you would like to see most of your students either maintaining or progressing into higher quartile ranges on CAAP than on the ACT as this indicates greater growth than exhibited by the reference group.

#### What to Look for:

- \*Do you consistently have more students scoring in higher quartile ranges on CAAP than they scored on the ACT?
- \*What percentage of your matched students in the first quartile on the ACT progressed to higher quartiles on CAAP?
- \*Across quartiles on the ACT, are more of your matched students in higher or lower quartiles on CAAP?
- \*Is the percentage of your matched students in the top ACT quartile equal to the percentage of your matched students in the top quartile on CAAP?

- \*Determine if students have taken all the necessary coursework between the ACT and CAAP testings to maintain or improve their quartile ranking.
- \*Encourage all students to take <u>all</u> the necessary general education coursework.
- \*Look at the motivation levels of your students to infer if most students gave their best effort on CAAP. (See the CAAP Institutional Summary Report for motivation information.)

## Performance of Your ACT/CAAP Matched Students in ACT and CAAP Science

Table 2. Frequencies, Means, and Standard Deviations for Your Matched Students Compared to the Reference Group on The ACT and CAAP

ACT So	ience			CAAP Science			
	<u>N</u>	<u>Mean</u>	<u>S.D.</u>		<u>N</u>	<u>Mean</u>	<u>S.D.</u>
Reference Group:	7,724	22.2	4.4	Reference Group:	7,724	61.7	4.5
Your Matched Students:	332	26.4	3.9	Your Matched Students:	332	66.4	3.1

#### What to Look For:

\*Is the ACT Science mean for Your Matched Students greater or less than the ACT Science mean for the Reference Group?

\*Is the CAAP Science mean for Your Matched Students greater or less than the CAAP Science mean for the Reference Group?

#### What to Do:

\*Determine if your matched students need more rigorous science-related instruction.

\*Refer to your CAAP Institutional Summary Report to examine the descriptive statistics for your entire CAAP-tested population and for subgroups (e.g., age, ethnicity, gender).

## Your ACT/CAAP Linkage Report

This report should be used as one piece of information in assessing the progress and status of your matched students. The accuracy of overall student status and progress reflected in this report is based on the quality of your sample.

When reviewing this report consider the following:

- \*Are the students in this report a representative sample of all students at your institution?
- \*Do you need to include more students in your next CAAP testing to obtain a better sample?

### **Additional Information to Review**

- \*The CAAP Institutional Summary Report
- \*The CAAP Content Analysis Report
- \*Student Grades/GPA in their science courses
- \*The number and rigor of science-related courses taken by the students who took CAAP
- \*Other student information (e.g., student major, full time, part time, motivation, etc.)