

CAAP Writing Skills & Writing Essay Tests Summary

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CAAP Writing Skills and Writing Essay Tests Summary

Introduction

The Collegiate Assessment of Academic Proficiency (CAAP) is a standardized, nationally-normed assessment program from ACT that enables postsecondary institutions to assess, evaluate, and enhance student learning outcomes and general education program outcomes. There are six different CAAP tests that institutions can choose to administer: Reading, Writing Skills, Writing Essay, Mathematics, Science, and Critical Thinking.

Owens adopted the CAAP Writing Skills and Writing Essay tests in the Fall of 2002, and they are administered every year to students enrolled in randomly-chosen sections of English 112. The CAAP Writing Skills Test is 40 minutes in length and includes 72 items that measure students' understanding of the conventions of standard written English in punctuation, grammar, sentence structure, strategy, organization, and style. Spelling, vocabulary, and rote recall of rules of grammar are not tested. The Writing Skills Test consists of six prose passages, each of which is accompanied by a set of 12 multiple-choice test items. A range of passage types is used to provide a variety of rhetorical situations. A sample passage with test items is provided in Appendix A.

The Writing Essay test is 40 minutes in length and includes two 20-minute writing tasks defined by a short prompt that identifies a specific hypothetical situation and audience. The hypothetical situation involves an issue on which the examinee must take a stand. An examinee is instructed to take a position on the issue and to explain to the audience why the position taken is the better (or best) alternative. Situations and audiences defined in the writing prompts are constructed so that the required background knowledge and experience are within the command of college sophomores. The two writing tasks are scored through a holistic scoring system. Essays are evaluated according to how well a student formulates a clear assertion on the issue defined by the prompt, supports that assertion with reasons and evidence appropriate to the position taken and the specified concerns of the audience, and develops the argument in a coherent and logical manner. A sample of the written essay instructions and prompt is in Appendix B.

Writing Skills Test

As indicated in Table 1, test questions fall into two major categories: Usage/Mechanics composed of 32 test questions (44% of questions) and Rhetorical Skills composed of 40 test questions (56% of questions). Subcategories exist for each major category. In the Usage/Mechanics category, 6 test questions (8% of questions) assess punctuation -- the use and placement of commas, colons, semicolons, dashes, parentheses, apostrophes, and quotation, question, and exclamation marks; 8 questions (11% of questions) assess grammar -- adjectives and adverbs, conjunctions, and agreement between subject and verb and between pronouns and their antecedents; and 18 questions (25% of questions) assess sentence structure -- the relationships between/among clauses, placement of modifiers, and shifts in construction. In the Rhetorical Skills category, 15 questions (21%

of questions) assess strategy, the appropriateness of expression in relation to audience and purpose, strengthening of writing with appropriate supporting material, and effective choice of statements of theme and purpose. Ten questions (14% of questions) assess organization, the organization of ideas and relevance of statements in context (order, coherence, unity). Fifteen questions (21% of questions) assess style, the precision and appropriateness in the choice of words and images, rhetorically effective management of sentence elements, avoidance of ambiguous pronoun references, and economy in writing.

Table 1. Content Specifications Summary for the CAAP Writing Skills Test

Content Category	Proportion of Test	Number of Items
Usage/Mechanics	.44	32
Punctuation	.08	6
Grammar	.11	8
Sentence Structure	.25	18
Rhetorical Skills	.56	40
Strategy	.21	15
Organization	.14	10
Style	.21	15
Total	1.00	72

Methodology

In November 2012, the Writing Skills and Essay Tests were administered to students in randomly selected sections of English 112. A total of 501 students were enrolled in the selected sections during Fall 2012, 247 in sections selected for the Writing Skills test and 254 in sections selected for the Writing Essay test. A total of 163 students completed the writing skills test, resulting in a response rate of 66.0% and a 7.1% margin of error¹; a total of 147 completed the Writing Essay test, resulting in a response rate of 57.9% and a 7.5% margin of error. Students enrolled in English 112 have already demonstrated competence at basic writing skills. Table 2 shows the self-reported demographic characteristics of the Writing Skills Test respondents. The self-reported demographics for the Writing Essay respondents were not available from ACT.

¹ The margin of error is a statistic that reflects the amount of sampling error in a survey's results and is based on the size of the sample (n=163) for Writing Skills, and (n=147) for Writing Essay in relation to the size of the population (N=1,092) students enrolled in all sections of the surveyed courses during the Fall of 2012. The lower the margin of error, the more confidence one can have that the data are representative of the full population. Ideally, the margin of error should be 5% or less. The way to reduce the margin of error is to increase the sample size (i.e., survey more students).

Table 2: Demographic Characteristics of Writing Skills Test Respondents, Fall 2012

	#	%		#	%		#	%
Ethnicity			Status			Major		
African-American/Black	19	12%	Full Time	106	65%	Undecided	8	5%
American Indian/ Alaskan Native	0	0%	Part Time	52	32%	Agriculture	1	1%
White/Caucasian	120	77%	No response	5	3%	Architecture	1	1%
Mexican American/ Chicano	3	2%				Biological Sciences	1	1%
Asian/Pacific Islander	5	3%	Cumulative GPA			Business	21	13%
Puerto Rican/Cuban/Hispanic	1	1%	Below 2.00	7	4%	Office Management	0	0%
Filipino	1	1%	2.01 - 2.50	34	21%	Marketing and Purchasing	2	1%
Other	2	1%	2.51 - 3.00	42	26%	Communications	3	2%
Prefer not to respond	7	4%	3.01 - 3.50	43	26%	Community Services	18	11%
No response	5	3%	3.51 and above	30	18%	Computer and Info Sciences	10	6%
			No Response	7	4%	General Studies	1	1%
Gender			Rank (Self-Reported)			Education	14	9%
Male	66	40%	Freshman	53	33%	Engineering	7	4%
Female	92	56%	Sophomore	84	52%	Fine & Applied Arts	6	4%
No response	5	3%	Junior	12	7%	Foreign Languages		0%
			Senior	4	2%	Health Professions	35	21%
Age			Other	4	2%	Home Economics	1	1%
18 and under	9	6%	No response	6	4%	Letters	0	0%
19-20	54	33%				Mathematics	1	1%
21-25	44	27%	Enrolled At Owens as Freshman			Philosophy/Religion		0%
26-30	15	9%	Yes	132	81%	Physical Sciences	3	2%
31-39	19	12%	No	26	16%	Social Sciences	7	4%
40 and older	22	13%	No response	5	3%	Trade and Industrial	5	3%
No response	0	0%				No response	18	11%

Summary of Writing Skills Test Results

As a general guide, differences in scores should be interpreted based on the standard deviations of the score distribution. Standard deviations are a measure of variation in the data such that 68% of scores fall within one standard deviation of the mean, 95% fall within two standard deviations, and 98% are within three. For the writing skills test, the national mean is 61.6, one standard deviation is between 56.8 – 66.4 (61.6 ± 4.8), two standard deviations are between 52.0 - 71.2 (61.6 ± 9.6), and three standard deviations are between 47.2 – 76.0 (61.6 ± 14.4). Differences of less than one standard deviation are considered negligible, differences between one and two standard deviations are considered moderate, and differences between two and three or more standard deviations are considered substantial.

Based on this guide, the results, displayed below in Table 3, show that Owens students differed very little from the national average, that there has been very little change between 2006 and 2012, and that there are few differences exhibited by any of the demographic groups.

Table 3: Average Writing Skills Scores by Student Group: Owens 2006 to 2012 vs. National Average

	2006		2007		2008		2009		2010		2011		2012		2012 National Average	
	Avg.	#	Avg.	#	Avg.	#	Avg.	#	Avg.	#	Avg.	#	Avg.	#	Avg.	S.D.
Overall	61.3	75	60.8	88	60.1	120	59.6	96	60.2	82	59.5	120	59.8	163	61.5	4.9
Ethnicity																
African-American/Black		1	56.0	7	57.0	12	54.0	8	57.0	11	55.0	7	57	19	NA	NA
American Indian/Alaskan Native		0		2		2		2		1		0		0	NA	NA
White/Caucasian	61.0	57	62.0	54	61.0	70	61.0	65	61.0	47	60.0	90	61	120	NA	NA
Mexican American/Chicano		4		3	62.0	5	57.0	6		3	57.0	7		3	NA	NA
Asian/Pacific Islander		0		0		1		1		0		1	56	5	NA	NA
Puerto Rican/Cuban/Hispanic		0		0		1		1		0		0		1	NA	NA
Filipino		0		0		0		0		0		0		1	NA	NA
Other		3		0		2	58.0	5		0		3		2	NA	NA
Prefer not to respond	64.0	5		1	61.0	6		4	63.0	6		3	59	7	NA	NA
No response	64.0	5	60.0	21	59.0	21		4	61.0	14	58.0	9	57	5	NA	NA
Gender																
Male	60.0	30	61.0	27	59.0	41	59.0	37	60.0	35	59.0	50	60	66	NA	NA
Female	62.0	41	61.0	45	61.0	63	60.0	58	61.0	34	60.0	66	60	92	NA	NA
No Response		4	60.0	16	60.0	16		1	61.0	13		4	58	5	NA	NA
Age																
18 and under	63.0	8	61.0	24	60.0	25	59.0	7	62.0	13	61.0	6	58	9	NA	NA
19-20	61.0	20	59.0	24	60.0	36	60.0	15	59.0	23	59.0	29	60	54	NA	NA
21-25	61.0	19	62.0	20	59.0	27	59.0	35	61.0	13	61.0	34	60	44	NA	NA
26-30	63.0	12		4	62.0	16	60.0	12	61.0	14	60.0	20	62	15	NA	NA
31-39	60.0	9	61.0	7	63.0	5	60.0	13	59.0	13	59.0	18	60	19	NA	NA
40 and older	60.0	7	61.0	9	59.0	11	58.0	14	59.0	6	57.0	13	58	22	NA	NA
No response		0		0		0										
Rank (Self-Reported)																
Freshman	62.0	29	61.0	29	62.0	36	61.0	38	60.0	25	60.0	35	60	53	61.6	4.8
Sophomore	61.0	32	61.0	30	60.0	45	60.0	34	59.0	27	60.0	57	60	84	61.6	4.8
Junior		4		4		3	58.0	12	61.0	6	59.0	14	60	12	NA	NA
Senior		3		1		2		3		1		1		4	NA	NA
Other		1		1		3		4		1	57.0	6		4	NA	NA
No response	65.0	6	60.0	23	59.0	31	55.0	5	61.0	22	58.0	7	56	6	NA	NA
Enrolled At Owens as Freshman																
Yes	60.0	59	61.0	55	61.0	74	60.0	79	60	54	60.0	101	60	32	NA	NA
No	65.0	9	61.0	11	57.0	11	59.0	15	60	11	58.0	13	61	26	NA	NA
No response	64.0	7	60.0	22	59.0	35		2	61	17	56.0	6	56	5	NA	NA

NOTES: ACT does not provide data for groups with a sample size of less than 5. National averages are only available in aggregate for freshmen and sophomores.

Table 3: Average Writing Skills Scores by Student Group: Owens 2006 to 2012 vs. National Average (Continued)

Status	2006		2007		2008		2009		2010		2011		2012		2012 National Average	
	Avg.	#	Avg.	#	Avg.	#	Avg.	#	Avg.	#	Avg.	#	Avg.	#	Avg.	S.D.
Full Time	60.0	40	61.0	53	60.0	77	60.0	66	60.0	55	60.0	78	60	106	NA	NA
Part Time	62.0	28	62.0	14	61.0	15	60.0	29	59.0	11	59.0	37	59	52	NA	NA
No response	64.0	7	60.0	21	59.0	28		1	61.0	16	56.0	5	56	5	NA	NA
Cumulative GPA																
Below 2.00		4		4	59.0	5	57.0	9		3	59.0	7	56	7	NA	NA
2.01 - 2.50	60.0	9	58.0	15	60.0	22	58.0	22	58.0	16	59.0	31	59	34	NA	NA
2.51 - 3.00	60.0	19	61.0	14	60.0	22	59.0	23	60.0	13	61.0	19	61	42	NA	NA
3.01 - 3.50	61.0	17	62.0	17	60.0	23	62.0	18	60.0	18	59.0	32	60	43	NA	NA
3.51 and above	64.0	17	64.0	13	62.0	11	61.0	18	63.0	11	60.0	21	61	30	NA	NA
No Response	63.0	9	59.0	25	59.0	37	60.0	6	61.0	21	59.0	10	57	7	NA	NA
Major																
Undecided		1	63.0	5				4		3		3	60	8	NA	NA
Agriculture		1								1		1		1	NA	NA
Architecture		1						1		0		0		1	NA	NA
Biological Sciences				2				1		0		1		1	NA	NA
Business	60.0	14	64.0	8	55.0	7	60.0	11	61.0	14	59.0	13	61	21	NA	NA
Office Management		1						1		1		2		0	NA	NA
Marketing and Purchasing		1		2						0		2		2	NA	NA
Communications				1				4		0	60.0	5		3	NA	NA
Community Services		2		2		1		3		4	63.0	6	59	18	NA	NA
Computer and Info Sciences		2		1		2		4		3	59.0	5	59	10	NA	NA
General Studies				1		2				0		0		1	NA	NA
Education	63.0	7	63.0	5		4	61.0	5	61.0	5	59.0	7	59	14	NA	NA
Engineering	58.0	5		3		1	59.0	5		0		3	63	7	NA	NA
Fine & Applied Arts				4		3		2		3		2	59	6	NA	NA
Foreign Languages										0		0			NA	NA
Health Professions	63.0	20	60.0	17	61.0	25	60.0	31	59.0	12	60.0	42	60	35	NA	NA
Home Economics				3		2		2		0		2		1	NA	NA
Letters										0		0		0	NA	NA
Mathematics										0		0		1	NA	NA
Philosophy/Religion				1						0		0			NA	NA
Physical Sciences						1		2		2		1		3	NA	NA
Social Sciences		2				4	58.0	8		1		4	59	7	NA	NA
Trade and Industrial		1		1		3				4		3	59	5	NA	NA
No response	60.0	17	59.0	32	60.0	65	58.0	12	60.0	29	58.0	18	59	18	NA	NA

NOTES: ACT does not provide data for groups with a sample size of less than 5. National averages are only available in aggregate for freshmen and sophomores.

Usage/Mechanics and Rhetorical Skills Sub-Tests
Summary of Test Results

For the Usage/Mechanics Test, the national mean is 15.9 with a standard deviation of ± 2.4 . One standard deviation is between 13.5 – 18.3 (15.9 ± 2.4), two standard deviations are between 11.1 – 20.7 (15.9 ± 4.8), and three standard deviations are between 8.7 – 23.1 (15.9 ± 7.3). Differences of less than one standard deviation are considered negligible, differences between one and two standard deviations are considered moderate, and differences between two and three or more standard deviations are considered substantial.

For the Rhetorical Test, the national mean is 15.8 with a standard deviation of ± 2.6 . One standard deviation is between 13.2 – 18.4 (15.8 ± 2.6), two standard deviations are between 10.6– 21.0 (15.8 ± 5.2), and three standard deviations are between 8.0 – 23.6 (15.8 ± 7.8). Again, differences of less than one standard deviation are considered negligible, differences between one and two standard deviations are considered moderate, and differences between two and three or more standard deviations are considered substantial.

Based on this guide, the results, displayed below in Table 4, show that for the Usage/Mechanics and Rhetorical Skills sub-tests, Owens students differed very little from the national average and that there has been very little change between 2006 and 2012.

Table 4: Usage/Mechanics and Rhetorical Skills Sub-scores 2006-2012

	2006		2007		2008		2009		2010		2011		2012		2012 National Average	
	Avg.	#	Avg.	#	Avg.	#	Avg.	#	Avg.	#	Avg.	#	Avg.	#	Avg.	S.D.
Usage/Mechanics	15.7	75	15.7	88	15.0	120	15.0	96	15.4	82	14.9	120	15.1	163	15.9	2.4
Rhetorical Skills	15.7	75	15.3	88	15.2	120	14.9	96	15.1	82	14.8	120	14.9	163	15.8	2.6

Writing Essay Test
Summary of Writing Essay Test Results

For the Writing Essay Test, the national mean is 3.1 with a standard deviation of ± 0.6 . One standard deviation is between 2.5 - 3.7 (3.1 ± 0.6), two standard deviations are between 1.9 - 4.3 (3.1 ± 1.2), and three standard deviations are between 1.3 – 4.9 (3.1 ± 1.8). The mean for Essay 1 is 3.1 with a standard deviation of ± 0.7 . The mean for the Essay 2 is 3.0 with a standard deviation of ± 0.7 . Differences of less than one standard deviation are considered negligible, differences between one and two standard deviations are considered moderate, and differences between two and three or more standard deviations are considered substantial.

Based on this guide, the results, displayed below in Table 5, show that for the Writing Essay Test, Owens students differed very little from the national average and that there has been very little change between 2006 and 2012.

Table 5: Average Writing Essay Scores Owens 2006-2012 vs. National Average

	2006		2007		2008		2009		2010		2011		2012		2012 National Average	
	Avg.	#	Avg.	#	Avg.	#	Avg.	#	Avg.	#	Avg.	#	Avg.	#	Avg.	S.D.
Overall	2.8	75	2.7	79	2.9	105	2.6	88	2.7	69	3.0	124	2.8	147	3.1	0.6
Essay 1	2.8	75	2.6	79	3.0	105	2.7	88	2.7	69	3.0	124	2.9	147	3.1	0.7
Essay 2	2.8	75	2.8	79	2.8	105	2.6	88	2.8	69	3.1	124	2.8	147	3.0	0.7

Note: Local and national normative data are based on students who completed both essays and have an Essay Composite score

Detailed Results

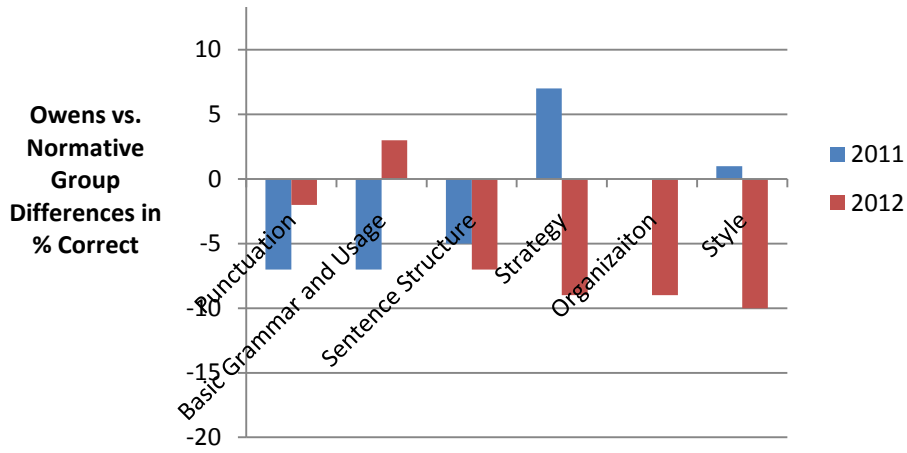
For the second time since Owens started administering the Writing Skills and Writing Essay Tests, a Content Analysis report was acquired from CAAP. The information provided in this report identifies specific content area in which Owens students are strong or weak relative to a normative group of students. The complete report is available in Appendix C.

Figure 1, 2, and 3 show the comparisons between Owens students (the local group) and normative groups upon the six measures of the Writing Skills Test: punctuation, basic grammar and usage, sentence structure, strategy, organization, and style. These are further broken down by student performance on this test: bottom 25%, middle 50%, and top 25%. Data for both available years, 2011 and 2012, are shown.

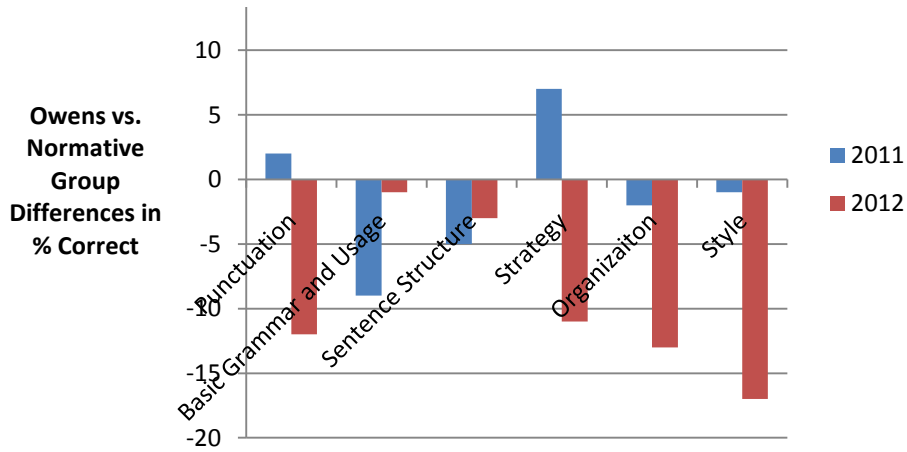
Differences with magnitudes less than 5%, between 5% and 10%, and greater than 10% are considered negligible, moderate, and substantial, respectively.

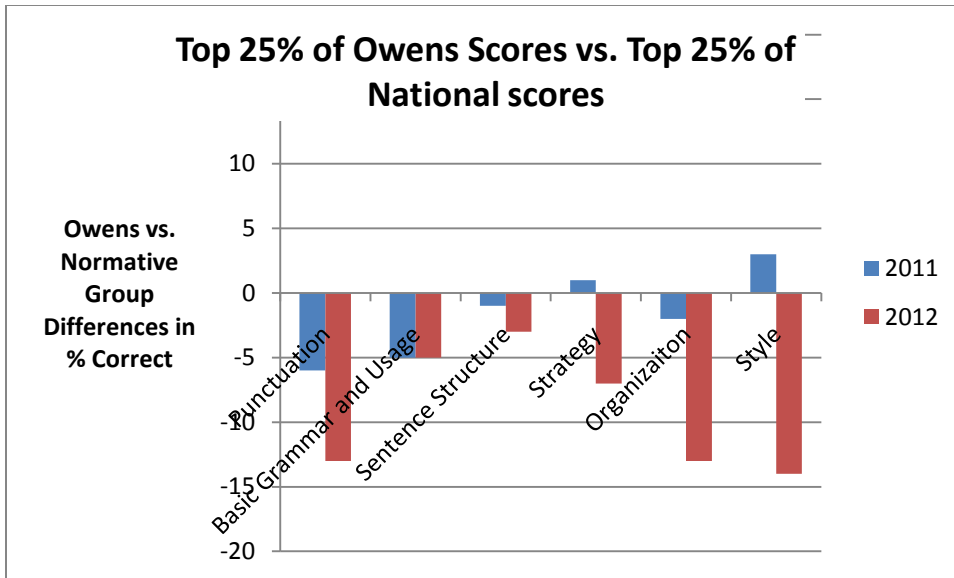
The variations between 2011 and 2012 results are so great in both magnitude and direction of difference that consultation with the ACT Content Analysis Research Group is being undertaken.

Lowest 25% of Owens Scores vs. Lowest 25% of National scores



Middle 50% of Owens Scores vs. Middle 50% of National scores





Conclusions and Limitations

Overall, results indicate that:

- Owens students do not differ meaningfully from a national sample of students at other two-year public institutions for the Writing Skills and the Writing Essay Tests
- There was no real change in students' writing skills or essay writing from 2006 to 2012
- There were no meaningful differences in writing skills among different student groups of Owens students

However, there are several limitations to the data that should be considered in the interpretation and use of results:

- Differences in scores from the national average, from year-to-year, and between groups are statistically very small and well within the normal range. Only differences of one standard deviation or more are unlikely to be due to chance and are of practical significance.
- Sample sizes for various student groups are very small and national averages for different student groups are not available; therefore, data by student demographic characteristics should be interpreted very cautiously.

Questions for future research and recommendations for maximizing the usefulness of results:

- Have students who take the CAAP Writing Skills and Writing Essay Tests completed courses that teach the writing skills being assessed?

- Examine the curriculum map for the general written communication student learning outcome and identify what courses introduce and reinforce written communication skills.
- Ensure that the CAAP is administered in courses that enroll a large proportion of students who have completed those courses.
- Order unit-level CAAP data and examine how many test respondents have taken English courses. Perhaps limit the analysis to these students or compare students who have completed the English curriculum to those who have not.
- How do students perform on each of the various content areas of the test?
 - Knowing the average overall writing skills score and the Usage/Mechanics and Rhetorical Skills subtest scores provide a general picture of students' skills. However, it does not provide actionable information for curriculum development and improvement.
 - It is recommended that the results of the Writing Skills Content Analysis report in Appendix C be used to identify strengths or weaknesses in specific writing skills (e.g., punctuation, grammar, sentence structure, strategy, organization, and style). This report also shows the percentage of students who test at each quartile on the test. For continuous improvement, ACT recommends that goals be established between test administrations to move a particular percentage of students (e.g., 3%) out of the bottom quartile into higher quartiles and develop an action plan to achieve this goal.
- Link the ACT or Compass Writing Scores to the CAAP Writing Skills Score. This comparison will demonstrate the learning gained by taking the English curriculum.

Appendix A

Writing Skills Sample Passage and Items

In the end, everyone gives up jogging. Some find that their strenuous efforts to earn a living **drains (1)** away their energy.

1. A. NO CHANGE
B. drain
C. has drained
D. is draining

Others **suffering from (2)** defeat by the hazards of the course, from hard pavement to muddy tracks, and from smog to sleet and snow.

2. A. NO CHANGE
B. suffered
C. suffer
D. suffering with

These can also (3) collapse in their sneakers.

3. A. NO CHANGE
B. Still others
C. They can also
D. They also can

My experience **having been different (4)**, however; I had a revelation.

4. A. NO CHANGE
B. being different,
C. was a difference,
D. was different,

It happened two summers ago at Lake Tom. I had been accustomed to running every day, but that week I decided to be lazy. I sailed, basked in the sun, and ate wonderfully: **the best meals I've ever eaten (5)**.

5. Which of the following would most specifically illustrate the point that the writer ate wonderfully?

A. NO CHANGE
B. nutritious and healthful meals.
C. lobster, steak, and baked potatoes.
D. breakfast, lunch and dinner.

By the fourth day I had to face the truth: my body was slowly changing to **becoming (6)** dough.

6. A. NO CHANGE
B. become
C. being
D. OMIT the underlined portion.

So I tied on my running shoes and loped out to the main road in search of a five-mile route. **Out of curiosity, I turned onto Lookout Hill Road (7)** and soon discovered how the road had come by its name.

7. A. NO CHANGE
B. Out of curiosity, Lookout Hill Road was turned onto
C. Having become curious, Lookout Hill Road was the route I turned onto
D. Curious, a turning into Lookout Hill Road was what I did,

I was chugging up one of the **longest, steepest (8)** inclines in the region. Perched at the top was a ramshackle house, and only a desire to get a closer look kept me going.

8. A. NO CHANGE
B. longest, steepest,
C. longest steepest,
D. longest and steepest,

I was exhausted when I reached the crest of the hill. There I found a native New Englander rocking on the front porch of the **house, which was painted (9)**. "Mister," I panted, "you sure live on a big hill!"

9. A. NO CHANGE
B. house (painted).
C. house, and it was painted.
D. house.

He studied me closely for a moment and then responded, "Yep, and I've got the good sense not to run up it." **That night I tied the laces of my running shoes around a rock and dropped them in Lake Tom (10)**.

10. Which of the following sentences would provide the conclusion that best supports the point made in the first paragraph that the writer gave up jogging because of a revelation?
- A. NO CHANGE
B. I realized that the New Englander was, indeed, correct, and walked back down the hill.
C. After that, I sat down on the porch and we talked for more than an hour.
D. Jogging may be good for you, but it's also tiring—especially if you jog up hills!

Answers:

1. B. 2. C. 3. B. 4. D. 5. C.
6. D. 7. A. 8. A. 9. D. 10. A.

Appendix B

Writing Essay Sample

Independent Prompt Example

Your college administration is considering whether or not there should be a physical education requirement for undergraduates. The administration has asked students for their views on the issue and has announced that its final decision will be based on how such a requirement would affect the overall educational mission of the college. Write a letter to the administration arguing whether or not there should be a physical education requirement for undergraduates at your college.

(Do not concern yourself with letter formatting; simply begin your letter, "Dear Administration.")

In an actual testing situation, your response will be evaluated by how well you formulate an assertion and support it with a coherent and logical argument.

Appendix C
Content Analysis From CAAP
Writing Skills Test