

Collegiate Assessment of Academic Proficiency (CAAP) Annual Analysis

For over ten years, completion of the Collegiate Assessment of Academic Proficiency (CAAP) examination has been a graduation requirement for all FRCC students. This assessment tool is currently being re-examined, so this is the final year for this analysis.

The CAAP assessment consists of five tests in writing, mathematics, reading, critical thinking, and scientific reasoning. Data for the 2013 academic year include summer 2012, fall 2012, and spring 2013. In AY13, 1,266 students completed the examination. 422 of them are sophomores who indicated they intend to transfer.

This report addresses three research questions (RQs):

1. How do FRCC AY13 CAAP scores compare against the national normative sample for public two-year institutions?
2. What do FRCC average scores look like over the last ten years?
3. How do FRCC scores for graduates planning on transferring compare against the national normative sample for public four-year institution students completing their sophomore year?

RQ1

The FRCC scores are compared to the national normative sample for public two-year institutions. Chart 1 shows this comparison for each test. FRCC scored significantly higher on all five tests, with the largest differences between these two groups in Reading scores.

Chart 1.

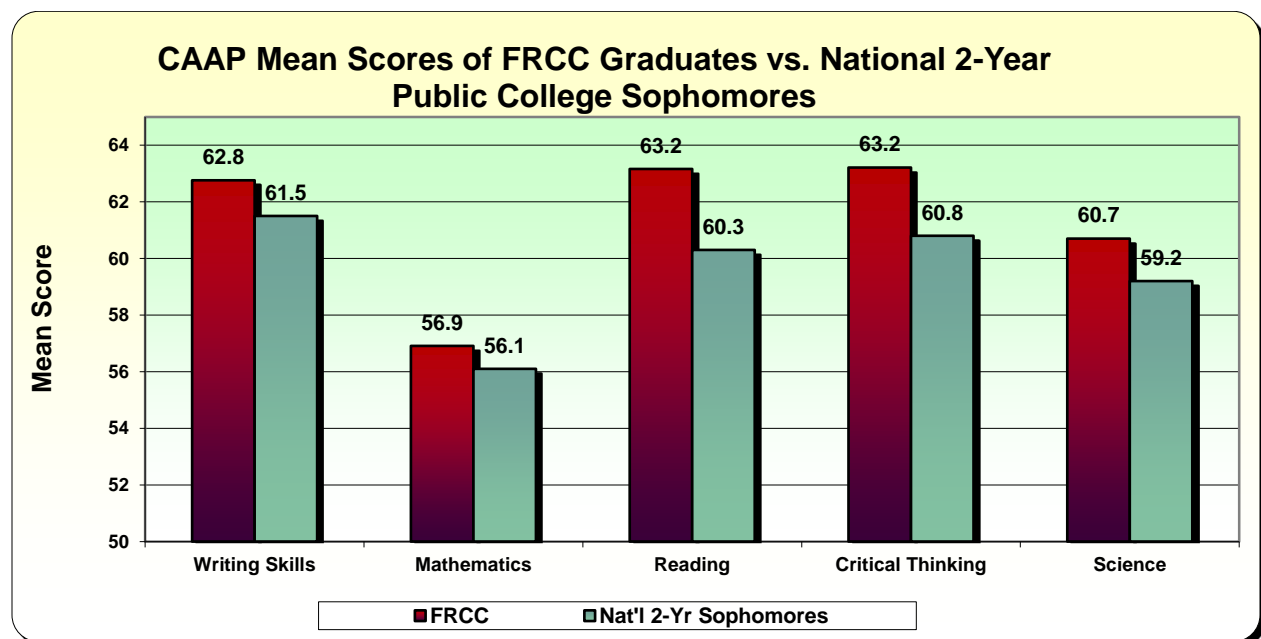


Table 1 shows the same results with more detail including the number of students that completed each test, mean scores for FRCC and national sophomores at 2-year institutions, and the significance of the mean difference. Additionally, the effect size is shown as an indication of practical significance.

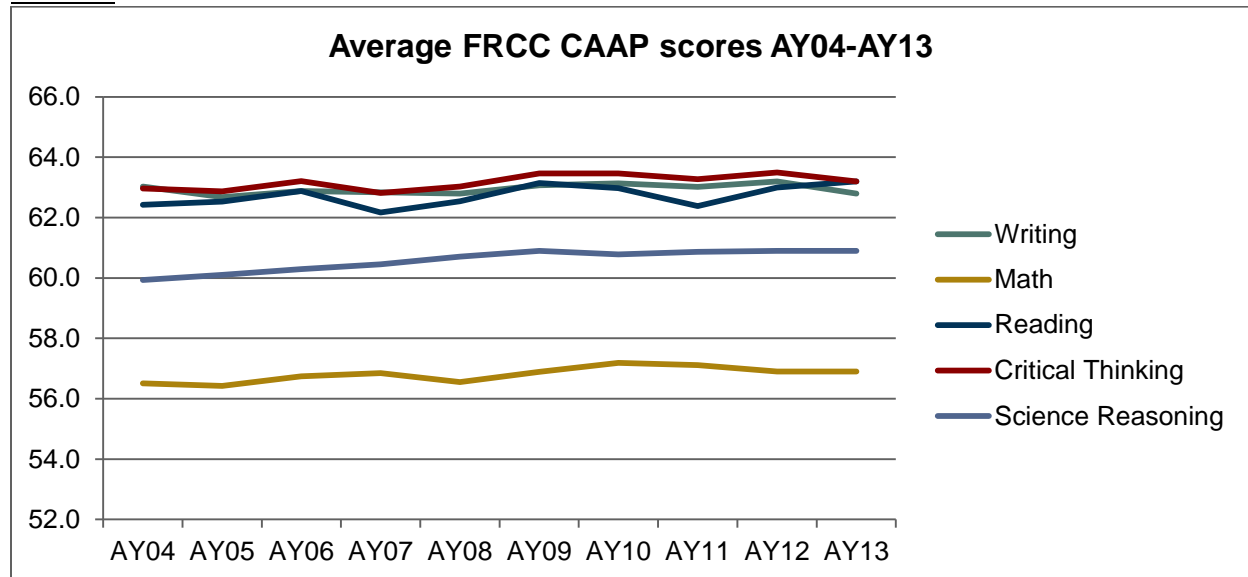
Table 1.

| TESTS | Count | All FRCC Graduates | | National 2-Year Public College Sophomores | | Significant Difference (p<.05) | Effect Size** | Effect Size Interpretation |
|-------------------|-------|--------------------|-----|---|-----|--------------------------------|---------------|----------------------------|
| | | Mean | SD | Mean* | SD | | | |
| Writing Skills | 1,266 | 62.8 | 4.7 | 61.5 | 4.8 | 0.000 | 0.3 | Small |
| Mathematics | 1,265 | 56.9 | 3.5 | 56.1 | 3.5 | 0.000 | 0.2 | Small |
| Reading | 1,264 | 63.2 | 5.5 | 60.3 | 5.6 | 0.000 | 0.5 | Large |
| Critical Thinking | 1,264 | 63.2 | 5.0 | 60.8 | 5.3 | 0.000 | 0.5 | Moderate |
| Science | 1,108 | 60.7 | 4.5 | 59.2 | 4.2 | 0.000 | 0.4 | Moderate |

RQ2

Chart 2 shows the trends for FRCC means on each test. Overall, average test scores indicate stability across time, with a slight upward trend on most tests.

Chart 2.



As depicted in Table 2, a trend analysis indicates that in the last ten years, FRCC has never fallen significantly below the national normative sample on any of the five tests. Each year FRCC scored significantly higher except two instances when there was no significant difference between FRCC and the national mean for two-year public institutions.

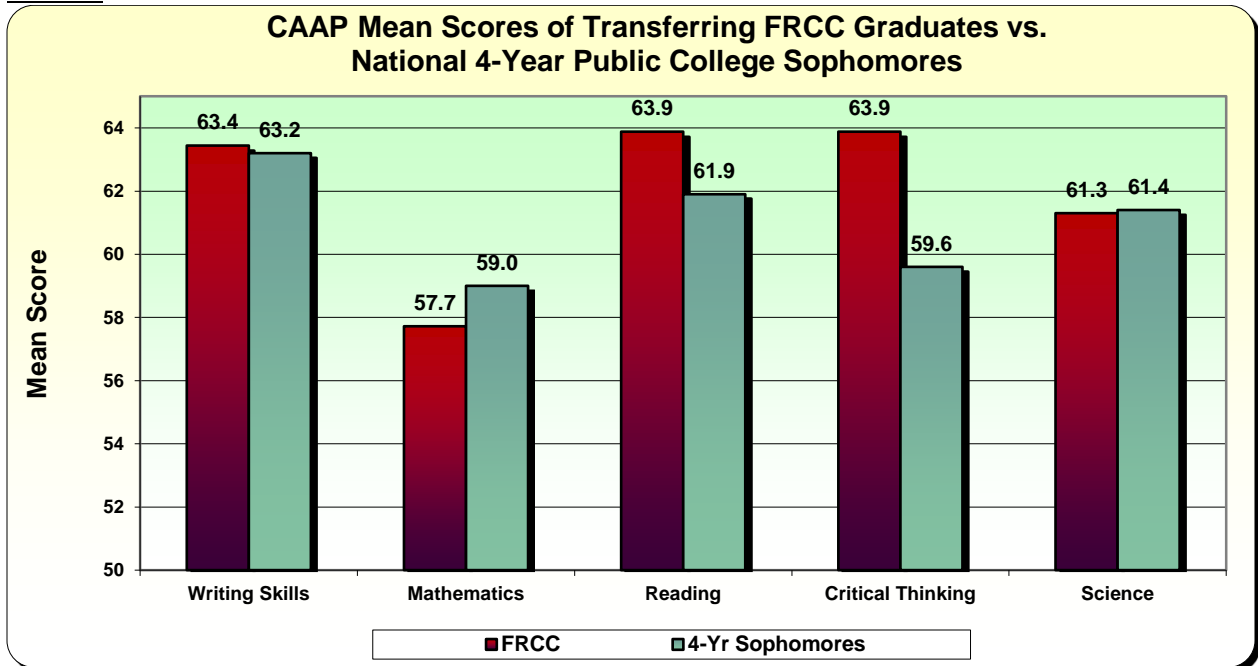
Table 2.

| FRCC Compared to National Norms (AY04-13) | | | | | | | | | | |
|---|------|------|------|------|------|------|------|------|------|------|
| Test | AY04 | AY05 | AY06 | AY07 | AY08 | AY09 | AY10 | AY11 | AY12 | AY13 |
| Writing | + | = | + | + | + | + | + | + | + | + |
| Math | + | + | + | + | = | + | + | + | + | + |
| Reading | + | + | + | + | + | + | + | + | + | + |
| Critical Thinking | + | + | + | + | + | + | + | + | + | + |
| Science Reasoning | + | + | + | + | + | + | + | + | + | + |

RQ3

Scores of FRCC graduates who intend to transfer are compared on each test to the national normative sample for sophomores at public four-year institutions. Chart 3 shows the comparison for each test.

Chart3.



FRCC transferring graduates did not significantly differ from public four-year sophomores in Writing Skills and Science tests. They are as prepared for upper division college work as those who have been attending four-year public institutions.

FRCC sophomores performed better than their four-year counterparts on Critical Thinking with a large effect size, and in Reading with a moderate effect size.

FRCC sophomores fell below the normative sample on Math with a small effect size. Table 3 displays these results. Red font indicates where the difference is not statistically significant.

Table 3

| TESTS | Count | FRCC Graduates Who Plan to Transfer | | National 4-Year Public College Sophomores | | Significant Difference (p<.05) | Effect Size** | Effect Size Interpretation |
|-------------------|-------|-------------------------------------|-----|---|-----|--------------------------------|---------------|----------------------------|
| | | Mean | SD | Mean* | SD | | | |
| Writing Skills | 422 | 63.4 | 4.5 | 63.2 | 5.1 | 0.275 | 0.05 | Insignificant |
| Mathematics | 422 | 57.7 | 3.4 | 59.0 | 4.2 | 0.000 | -0.30 | Small |
| Reading | 422 | 63.9 | 5.4 | 61.9 | 5.6 | 0.000 | 0.35 | Moderate |
| Critical Thinking | 422 | 63.9 | 4.8 | 59.6 | 5.3 | 0.000 | 0.81 | Large |
| Science | 422 | 61.3 | 4.4 | 61.4 | 5.1 | 0.652 | -0.02 | Insignificant |

Conclusion

Our three original research questions have an overall favorable outlook for student achievement in five tests of FRCC's general education goals.

1. FRCC was above the national norm for 2-year institutions on all tests for AY13.
2. FRCC scores have remained stable across the last ten years, consistently above the national norms for other two-year public institutions.
3. FRCC sophomores who plan to transfer to a 4-year institution were similar to their 4-year counterparts on two areas (Science and Writing Skills), surpassed them in two areas (Critical Thinking and Reading), and trailed them in one area (Math).

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