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EXECUTIVE SUMMARY

The proprietary education sector stands at a crossroads. Proprietary colleges and universities are key providers of postsecondary education in the United States, enrolling over 1.7 million students. However, the sector has seen its enrollment decline since its peak in 2010 due to the growing employment opportunities following the Great Recession, the heavy regulatory burdens imposed during the last six years, and the perception that education at proprietary institutions is not on par with that offered by their non-proprietary peers.

The Council for Aid to Education (CAE) believes this junction presents a critical time to explore the efficacy of proprietary institutions and to document the student learning they support. To accomplish this, CAE used their Collegiate Learning Assessment (CLA+) to answer the following questions:

- Do students who attend proprietary institutions achieve student learning outcomes similar to comparable students who attend comparable non-proprietary institutions?
- Is there a difference in growth in learning exhibited by comparable students at proprietary versus non-proprietary institutions?

To investigate these questions, this report compares the performance of students at four proprietary higher education systems, which together make up almost one-third of students in the proprietary sector, with the performance of students at a group of 20 non-proprietary public and not-for-profit institutions selected to be similar to the proprietary institutions on key measures that are related to academic performance.

This study shows that there are no statistically significant differences between students at proprietary and non-proprietary institutions with respect to their academic outcomes, as measured by CLA+. The one exception was the scores of seniors on the Performance Task; in which case, students at proprietary institutions outperformed students at non-proprietary institutions by a small margin. The study also shows that there is no difference in growth exhibited by students in either group. The effect sizes were almost identical. Additionally, while the value-added scores were slightly better for proprietary institutions, this group difference was not statistically significant.

In short, this study suggests that students who attend proprietary institutions achieve similar learning results as students who attend comparable non-proprietary institutions.
INTRODUCTION

The proprietary education sector stands at a crossroads. Proprietary colleges and universities are key providers of postsecondary education in the United States, enrolling over 1.7 million students. However, the sector has seen its enrollment decline since its peak in 2010 due to the growing employment opportunities following the Great Recession, the heavy regulatory burdens imposed during the last six years, and the perception that education at proprietary institutions is not on par with that offered by their non-proprietary peers.

The Council for Aid to Education (CAE) believes this junction presents a critical time to explore the efficacy of proprietary institutions and to document the student learning they support. To accomplish this, CAE used the CAE’s Collegiate Learning Assessment (CLA+) to answer the following two questions:

- Do students who attend proprietary institutions achieve student learning outcomes similar to comparable students who attend comparable non-proprietary institutions?
- Is there a difference in growth in learning exhibited by comparable students at proprietary versus non-proprietary institutions?

In exploring these questions, students from a set of proprietary institutions were matched with students from non-proprietary ones on demographic variables such as race/ethnicity, gender, language spoken at home, parents’ highest level of education, and field of study. More specifically, the goal of this study was to investigate:

- Whether there was a significant difference on CLA+ performance between students from the proprietary and non-proprietary sectors in higher education
- Whether there was a difference in the CLA+ value-added scores for proprietary and non-proprietary institutions
- Whether there was a difference in participating institutions “value added” to their students’ learning outcomes

To this end, this report compares the performance of students at four proprietary higher education systems, which together make up almost one-third of students in the proprietary sector, with the performance of students at a group of 20 non-proprietary public and not-for-profit institutions selected to be similar to the proprietary institutions on key measures related to academic performance. Academic outcomes include CLA+ total score and subscores, levels of mastery, and two measures of growth in student learning.

CLA+, a performance-based assessment of critical-thinking and written-communication skills, consists of two sections, a Performance Task (PT), which requires students to generate a written response to a given scenario and a Selected-Response Question (SRQ) section.¹ Students have 90 minutes to complete the two sections of the assessment—60 minutes for the PT and 30 minutes for the SRQ section.

RESULTS

INSTITUTIONAL CHARACTERISTICS
Table 1 shows the institutional characteristics that were used in selecting the institutional matches. None of the measures used to select comparison institutions were significantly different between the group of proprietary institutions and the group of non-proprietary comparison ones.

CLA+ TEST SCORES
The total CLA+ scores, PT sub-scores, and SRQ section sub-scores at freshman and senior class levels are used to compare the performance of students at proprietary institutions to a matched group of students at the non-proprietary ones. In all six comparisons, students at proprietary institutions outperformed the students at the non-proprietary comparison institutions. However, in all but one case, the difference in mean scores is too small to be considered statistically significant. Table 2 shows the full set of results, including the results of the significance tests (independent-samples t-tests).

For example, freshmen at proprietary institutions scored on average 18 points higher on the test as a whole, 24 points higher on the PT, and 10 points higher on the SRQ section. But the results for all three scores fell short of the standard .05 level of statistical significance, suggesting that freshmen entering proprietary institutions perform on par with freshmen entering the non-proprietary comparison institutions.

Seniors at proprietary institutions scored on average 21 points higher on the test as a whole, 32 points higher on the PT, and 15 points higher on the SRQ section, versus seniors at non-proprietary comparison institutions. While the results for the PT were statistically significant at the .05 level, the results on total scores and the SRQ section were not. These results suggest that seniors at proprietary institutions have better problem-solving, critical-thinking, and written-communication skills as measured by the PT than do their peers at the non-proprietary comparison institutions, and that the two groups are equal on the skills assessed by the SRQ section.

It should be noted that, due to differences between proprietary and non-proprietary institutions on mean age (34 mean vs. 23 mean) and graduation rate (27% vs. 43%), it is possible that some of the above findings could be attributed to one or both of these factors. However, if age or graduation rate had a strong effect on CLA+ performance, one would expect that it would influence all three outcomes and not just seniors’ PT scores. That differences are not seen across all outcome variables is partial evidence that these factors are unlikely to be the primary cause of the differences observed in seniors’ PT scores.

TABLE 1. Institutional characteristics by proprietary status

<table>
<thead>
<tr>
<th>DEMOGRAPHIC VARIABLES AND FIELD OF STUDY</th>
<th>PROPRIETARY (N = 4)</th>
<th>NON-PROPRIETARY (N = 20)</th>
<th>Statistical Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLACK/AFRICAN-AMERICAN</td>
<td>18% 3%</td>
<td>12% 12%</td>
<td>t(15) = -0.54, p = .60</td>
</tr>
<tr>
<td>HISPANIC/LATINO</td>
<td>9% 3%</td>
<td>8% 8%</td>
<td>t(15) = -0.86, p = .40</td>
</tr>
<tr>
<td>PARENTAL EDUCATION</td>
<td>13.83 0.23</td>
<td>13.91 0.43</td>
<td>t(15) = 0.83, p = .42</td>
</tr>
<tr>
<td>GENDER (% FEMALE)</td>
<td>69% 10%</td>
<td>65% 12%</td>
<td>t(15) = -1.14, p = .27</td>
</tr>
<tr>
<td>ENGLISH AS A FIRST LANGUAGE</td>
<td>94% 3%</td>
<td>93% 8%</td>
<td>t(15) = -0.30, p = .77</td>
</tr>
<tr>
<td>BUSINESS MAJORS</td>
<td>38% 11%</td>
<td>32% 19%</td>
<td>t(15) = -2.04, p = .06</td>
</tr>
<tr>
<td>HELPING/SERVICES MAJORS</td>
<td>28% 19%</td>
<td>21% 11%</td>
<td>t(15) = -0.55, p = .59</td>
</tr>
</tbody>
</table>
TABLE 2. CLA+ Performance by Proprietary Status and Class Level

<table>
<thead>
<tr>
<th>SCORE</th>
<th>PROPRIETARY (N = 4) Mean (SD)</th>
<th>NON-PROPRIETARY (N = 20) Mean (SD)</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRESHMEN</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1040 (142)</td>
<td>1022 (132)</td>
<td>t(590) = 1.52, p = .13</td>
</tr>
<tr>
<td>PT</td>
<td>1018 (166)</td>
<td>994 (156)</td>
<td>t(590) = 1.82, p = .07</td>
</tr>
<tr>
<td>SRQ</td>
<td>1060 (169)</td>
<td>1050 (165)</td>
<td>t(590) = 0.76, p = .45</td>
</tr>
<tr>
<td>SENIORS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1094 (144)</td>
<td>1073 (143)</td>
<td>t(654) = 1.88, p = .06</td>
</tr>
<tr>
<td>PT</td>
<td>1081 (177)</td>
<td>1053 (157)</td>
<td>t(654) = 2.13, p &lt; .05</td>
</tr>
<tr>
<td>SRQ</td>
<td>1108 (167)</td>
<td>1093 (183)</td>
<td>t(654) = 1.06, p = .29</td>
</tr>
</tbody>
</table>

MASTERY LEVELS
The average senior total score among students at proprietary institutions was 1094, which corresponds to the Basic Mastery Level. The average senior total score among students at non-proprietary comparison institutions was 1073, which also corresponds to a Basic Mastery Level. See Figure 1.

While students in the comparison group had higher proportions of Below Basic and Basic Mastery Levels, students in the proprietary group had higher proportions of Proficient and Accomplished Mastery Levels. An equal proportion (2%) of students in both groups achieved an Advanced Mastery Level. However, this difference in mastery level distributions fell short of attaining statistical significance \(\chi^2(4, N = 1248) = 8.65, p = .07\), indicating no overall difference in mastery level distribution between students attending the proprietary institutions and students attending the non-proprietary comparison institutions.

FIGURE 1. Distribution of Seniors’ CLA+ Mastery Levels

GROWTH ESTIMATES
Are there differences in learning growth between students in the proprietary versus non-proprietary institutions? Two types of growth estimates are used to quantify the degree of change between freshman and senior years: effect sizes and value-added scores.

An effect size is the differences in senior and freshmen CLA+ total scores standardized by the standard deviation of freshman CLA+ total scores. One effect size is calculated per institution. Empirically, there was no difference in effect sizes between proprietary and non-proprietary comparison schools.

The value-added score is the standardized difference in observed and expected mean senior CLA+ total scores. Positive scores indicate better-than-expected performance and negative scores indicate worse-than-expected performance.

Figure 2 shows the performance of all institutions in this study, with gray dots corresponding to the non-proprietary comparison institutions and red triangles...
corresponding to the four proprietary institutions. Two proprietary institutions are below the dashed line that indicates observed performance equal to expected performance, and the other two proprietary institutions are above this line. Virtually identical proportions of proprietary and non-proprietary schools fell on either side of the dashed line, indicating that the proprietary institutions and the non-proprietary comparison institutions had fairly similar value-added scores.

**CONCLUSION**

This study examined differences in educational achievement between proprietary and non-proprietary institutions. Multivariate and propensity matching methods were used to obtain a data set of students from non-proprietary institutions similar to the proprietary institutions. The questions addressed in this report were:

- **Is there a significant difference on CLA+ performance between students from the proprietary and non-proprietary sectors in higher education?**

This study shows that there are no statistically significant differences between students at proprietary and non-proprietary institutions with respect to their academic outcomes, as measured by CLA+. The one exception was the scores of seniors on the Performance Task, in which case students at proprietary institutions outperformed students at non-proprietary institutions by a small margin.

- **Is there a difference in growth in learning exhibited by students at proprietary versus non-proprietary institutions?**

The results of this study suggest that there is no difference in growth exhibited by students in either group. The effect sizes were almost identical. Additionally, while the value-added scores were a little better for proprietary institutions, this group difference was not statistically significant.

In short, this study suggests that students who attend proprietary institutions achieve similar learning results as students who attend comparable non-proprietary institutions.
THE ASSESSMENT
The Performance Task presents students with a real-world scenario that requires a purposeful written response. Students are asked to address an issue, propose the solution to a problem, or recommend a course of action to resolve a conflict. Students are instructed to support their responses by using information provided in the Document Library. This repository contains a variety of reference materials, such as technical reports, data tables, newspaper articles, office memoranda, and emails. A full PT includes between four and nine documents in its Document Library.

Student responses to the PT are scored in three skill areas: Analysis and Problem Solving, Writing Effectiveness, and Writing Mechanics. Students receive subscores based on the CLA+ Rubric, ranging from 1 to 6, for each skill category based on key characteristics of their written responses.²

In the second section of the examination, students are asked to answer 25 Selected-Response Questions. Like the PT, the 25 SRQs require students to draw information from provided materials. The SRQ section is scored based on the number of correct responses that a student provides. Each of the three question sets represents a skill area: Scientific and Quantitative Reasoning (10 questions), Critical Reading and Evaluation (10 questions), and Critique an Argument (five questions). Because some question sets may be more difficult than others, the subscores for each category are adjusted to account for these differences and reported on a common scale. Scores range from approximately 200 to 800 for each SRQ section.

To convert raw PT and SRQ section scores to scale scores, CAE uses a linear transformation. The process creates a scale score distribution for CLA+ freshmen that has the same mean and standard deviation as their combined SAT Math and Critical Reading (or converted ACT) scores. The result is a scale that ranges from approximately 400 to 1600.

MASTERY LEVELS
CLA+ also reports five mastery levels: Below Basic, Basic, Proficient, Accomplished, and Advanced,³ that correspond to evidence of critical-thinking and written-communication skills. While the profiles of all five mastery levels can be found in Appendix A, the two most prominent mastery level profiles from the 2015-16 testing administration are highlighted below.

Students who score at the Basic Mastery Level provide evidence of a discernable and relevant attempt to analyze the details of the PT and to demonstrate that they are able to communicate in a manner that is understandable to the reader. Students with Basic Mastery also show some judgment about the quality of evidence provided in the Document Library.

In addition, students scoring at the Basic Mastery Level know the difference between correlation and causality, and can read and interpret a bar graph—but not necessarily a scatterplot or regression analysis. Tables may be out of reach for Basic Mastery Level students as well.

Students scoring at the Proficient Mastery Level have shown that they are able to extract the major relevant pieces of evidence provided in the Document Library and develop a cohesive argument and analysis of the PT. Proficient Mastery Level students are able to distinguish the quality of evidence in these documents and express the appropriate level of conviction in their conclusion given the provided evidence. Additionally, Proficient Mastery Level students are able to suggest additional research or consider counterarguments.

Students scoring at the Proficient Mastery Level can correctly identify logical fallacies, accurately interpret quantitative evidence, and distinguish the validity of evidence and its purpose. Likewise, they have the ability to determine the reliability and validity of an argument. Students at this level also recognize when a graph or table is applicable to an argument.

GROWTH ESTIMATES
CAE calculates two types of growth estimates for participating institutions: effect sizes and value-added scores.

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² See: [www.cae.org/claprubic](http://www.cae.org/claprubic).
Effect sizes characterize the amount of growth in student learning by subtracting the mean freshman score from the mean senior score and dividing this amount by the freshman standard deviation.

While effect sizes measure growth between freshman and subsequent years within an institution, value-added scores can be used to compare student growth across colleges and universities.

However, because student populations vary widely across institutions, a simple comparison of the average achievement at institutions would not present a true picture of the gains institutions have helped students achieve.

Value-added modeling attempts to equalize factors that are not “school effects” so that between-institution comparisons of growth are not confounded with factors outside of institutions’ control. More specifically, by controlling for differences in the socioeconomic status of students, value added is more purely a measure of a school’s contribution to student learning than is effect size.

To calculate value-added estimates, CAE employs a statistical technique known as hierarchical linear modeling (HLM). This method yields value-added scores that indicate the degree to which observed senior CLA+ mean scores at an institution meet, exceed, or fall below expectations as established by two factors: the highest level of education attained by either parent of each senior (a measure that acts as a proxy for other socioeconomic variables), and the mean CLA+ performance of freshmen at the institution, which serves as a baseline for growth at each institution.

INSTITUTIONAL AND STUDENT SAMPLE
Participating institutions were individually responsible for student sampling and recruitment, with guidance provided by CAE on strategies for achieving a representative sample. CAE recommends that institutions test at least 100 students, or 25% to 50% of the population size for each class level tested. The four proprietary institutions in this report tested at least 75 students in each of their freshman and senior classes. The total sample from these institutions comprised 624 students (296 freshmen and 328 seniors). In addition to obtaining total, PT, and SRQ scores, and mastery levels derived from total scores, institutions’ registrars or the students themselves provided information on their class level, gender, race/ethnicity, highest level of parental education, field of study, and whether they speak English as a first language.

The non-proprietary comparison sample comprised the same numbers of freshmen and seniors at demographically similar institutions. Additionally, the students from the non-proprietary comparison institutions were matched one-to-one with the students at the proprietary ones.

MATCHING METHODOLOGY
In the first round of matching, the comparison institutions were chosen using the following method:

1. Start with all freshmen and seniors who tested in Spring 2015 or Fall 2015.
2. Aggregate information on these students’ demographic variables plus field of study to obtain institution-level means and proportions to compare with the proprietary institutions’ means and proportions.
3. Choose 20 institutions (with at least 50 tested students each) that have measured characteristics as similar as possible to those of the proprietary institutions.

In the second round of matching, students from the 20 comparison institutions were matched one-to-one with students from the proprietary institutions. All other students from the non-proprietary comparison institutions (i.e., those who were not matched with students from the proprietary institutions) were excluded from the analyses.

After creating a matched data set, it is customary to examine the balance of the variables used for matching between the two groups. Table 3 shows the breakdown of these variables by proprietary/non-proprietary and class status. Nearly identical percentages were obtained for the different variables taken into consideration. The one exception to this was the field of study. Two-thirds to three-quarters of students at the proprietary institutions (depending on class level) majored in either business or helping/services fields, proportions that could not be matched by the comparison students in non-proprietary institutions. However, all measures in the table were more balanced after matching than before, with small standardized mean differences between proprietary institutions and non-proprietary comparison institutions, and with tests indicating no significant difference between groups.
### TABLE 3. Demographic Plus Field of Study Characteristics by Proprietary Status and Class Level

<table>
<thead>
<tr>
<th>KEY VARIABLE</th>
<th>FRESHMEN (N = 592)</th>
<th>SENIORS (N = 656)</th>
<th>PROPRIETARY</th>
<th>NON-PROPRIETARY</th>
<th>PROPRIETARY</th>
<th>NON-PROPRIETARY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(N = 296)</td>
<td>(N = 328)</td>
<td>(N = 296)</td>
<td>(N = 328)</td>
<td>(N = 296)</td>
<td>(N = 328)</td>
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<tr>
<td>GENDER</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>MALE</td>
<td>26%</td>
<td>39%</td>
<td>25%</td>
<td>35%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FEMALE</td>
<td>72%</td>
<td>59%</td>
<td>73%</td>
<td>61%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DECLINE TO STATE</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
<td>4%</td>
<td></td>
<td></td>
</tr>
<tr>
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<tr>
<td>ASIAN</td>
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<td>3%</td>
<td>2%</td>
<td>7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BLACK/AFRICAN-AMERICAN</td>
<td>21%</td>
<td>17%</td>
<td>21%</td>
<td>15%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HISPANIC/LATINO</td>
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<td>10%</td>
<td>9%</td>
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<tr>
<td>WHITE/CAUCASIAN</td>
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<td>59%</td>
<td>57%</td>
<td>59%</td>
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<tr>
<td>OTHER/DECLINE</td>
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<td>11%</td>
<td>11%</td>
<td>13%</td>
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</tr>
<tr>
<td>ENGLISH AS A FIRST LANGUAGE</td>
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<tr>
<td>YES</td>
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<tr>
<td>NO</td>
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<td>8%</td>
<td>6%</td>
<td>9%</td>
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<td>FIELD OF STUDY</td>
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<tr>
<td>BUSINESS</td>
<td>40%</td>
<td>39%</td>
<td>32%</td>
<td>26%</td>
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<td>HELPING/SERVICES</td>
<td>25%</td>
<td>37%</td>
<td>20%</td>
<td>25%</td>
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<td></td>
</tr>
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<td>HUMANITIES</td>
<td>11%</td>
<td>4%</td>
<td>10%</td>
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<td>SOCIAL SCIENCES</td>
<td>19%</td>
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<td>16%</td>
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</tr>
<tr>
<td>STEM</td>
<td>6%</td>
<td>7%</td>
<td>28%</td>
<td>20%</td>
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<td></td>
</tr>
<tr>
<td>PARENTAL EDUCATION (AVG YRS)</td>
<td>14</td>
<td>14</td>
<td>14</td>
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</table>
APPENDIX A: CLA+ MASTERY LEVELS

SETTING STANDARDS FOR CLA+
Following the creation of CLA+, a standard-setting study was conducted to establish fair and defensible levels of mastery for the new and improved assessment. This formal study was held at CAE headquarters in New York City on December 12, 2013. Twelve distinguished panelists, representing a variety of educational and commercial sectors, were invited to participate. The table below lists each panelist.

During the standard-setting study, panelists defined descriptions of three mastery levels: Basic, Proficient, and Advanced. Their discussions were based on the CLA+ scoring rubric as well as the knowledge, skills, and abilities required to perform well on CLA+. The purpose of this activity was to develop consensus among the judges regarding each mastery level and to create a narrative profile of the knowledge, skills, and abilities necessary for CLA+ students.

During subsequent rating activities, panelists relied on these consensus profiles to make item performance estimates. Judges broke into three groups of four and each group evaluated characteristics related to one mastery level. The groups then reconvened and reported their findings to the group at large so they could form final consensus on student performance at each of the five mastery levels.

CLA+ Standard-Setting Study Participant List and Institutional Affiliation

<table>
<thead>
<tr>
<th>PARTICIPANT</th>
<th>INSTITUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aviva Altman</td>
<td>Johnson &amp; Johnson</td>
</tr>
<tr>
<td>Jon Basden</td>
<td>Federal Reserve</td>
</tr>
<tr>
<td>Mark Battersby</td>
<td>Capilano University (Canada)</td>
</tr>
<tr>
<td>Paul Carney</td>
<td>Minnesota State Technical and Community College</td>
</tr>
<tr>
<td>Anne Dueweke</td>
<td>Kalamazoo College</td>
</tr>
<tr>
<td>Terry Grimes</td>
<td>Council of Independent Colleges</td>
</tr>
<tr>
<td>Sonia Gugga</td>
<td>Columbia University</td>
</tr>
<tr>
<td>Marsha Hirano-Nakanishi</td>
<td>California State University System</td>
</tr>
<tr>
<td>Rachel L. Kay</td>
<td>McKinsey &amp; Company</td>
</tr>
<tr>
<td>Michael Poliakoff</td>
<td>American Council of Trustees and Alumni</td>
</tr>
<tr>
<td>Elizabeth Quinn</td>
<td>Fayetteville State University</td>
</tr>
<tr>
<td>Paul Thayer</td>
<td>Colorado State University</td>
</tr>
</tbody>
</table>

CLA+ MASTERY LEVELS
CAE uses outcomes from the 2013 standard-setting study to distinguish between CLA+ students with varying knowledge, skills, and abilities, as measured by the assessment. On individual reports, mastery levels are determined by students’ Total CLA+ scores. On institutional reports, they are determined by each class level’s mean Total CLA+ score.

Institutions should not use mastery levels for purposes other than the interpretation of test results. If an institution wishes to use the attainment of CLA+ Mastery Levels as part of a graduation requirement or the basis for an employment decision, the institution should conduct a separate standard-setting study with this specific purpose in mind.

The following table summarizes each level of mastery and provides a description of students below the basic level of mastery.
## Student Levels of Mastery Profiles

<table>
<thead>
<tr>
<th>LEVEL OF MASTERY</th>
<th>PROFILE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BELOW BASIC</strong></td>
<td>Students who are below basic do not meet the minimum requirements to merit a basic level of mastery. Students at the basic level should also know the difference between correlation and causality. They should be able to read and interpret a bar graph, but not necessarily a scatter plot or comprehend a regression analysis. Tables may be out of reach for basic students as well.</td>
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<td><strong>BASIC</strong></td>
<td>Students at the basic level should be able to demonstrate that they at least read the documents, made a reasonable attempt at an analysis of the details, and are able to communicate in a manner that is understandable to the reader. Students should also show some judgment about the quality of the evidence.</td>
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<td><strong>PROFICIENT</strong></td>
<td>Students at the proficient level should be able to extract the major relevant pieces of evidence provided in the documents and provide a cohesive argument and analysis of the task. Proficient students should be able to distinguish the quality of the evidence in these documents and express the appropriate level of conviction in their conclusion given the provided evidence. Additionally, students should be able to suggest additional research and/or consider the counterarguments. Minor errors in writing need to be defined rigorously. Proficient students have the ability to correctly identify logical fallacies, accurately interpret quantitative evidence, and distinguish the validity of evidence and its purpose. They should have the ability to determine the truth and validity of an argument. Finally, students should know when a graph or table is applicable to an argument.</td>
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<tr>
<td><strong>ACCOMPLISHED</strong></td>
<td>Students at the accomplished level of mastery should be able to analyze the information provided in the documents, extract relevant pieces of evidence, and make correct inferences about this information. Accomplished students should be able to identify bias, evaluate the credibility of the sources, and craft an original and independent argument. When appropriate, students will identify the need for additional research or further investigation. They will refute some but not all of the counterarguments within the documents and use this information to advance their argument. Accomplished students also have the ability to correctly identify logical fallacies, accurately interpret and analyze qualitative and quantitative evidence (e.g., graphs and charts), and incorporate this information into their argument. Students will be able to correctly identify false claims and other sources of invalid information and integrate this information in their responses. Student responses are presented in a cohesive and organized fashion. There may be infrequent or minor errors in writing fluency and mechanics, but they will not detract from the reader’s comprehension of the text.</td>
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<tr>
<td><strong>ADVANCED</strong></td>
<td>Students at the advanced level demonstrate consistency, completeness, and show a command of the English language in their response. They have a level of sophistication that is not seen in the proficient or basic levels. Advanced students create and synthesize the provided evidence, are comfortable with ambiguity, are able to structure their thoughts, understand causality, add new ideas, and introduce new concepts in order to create or seek new evidence. They think about conditions and nuances and express finer points and caveats by proposing a conditional conclusion. The students at this level display creativity and synthesis, while understanding the finer points in the documents. For example, advanced students will be able to synthesize the information across multiple documents and address the ambiguities in the data that are presented, such as outliers and knowing how sample size affects outcomes. Advanced students will also be able to identify and highlight gaps in logic and reasoning.</td>
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## APPENDIX B: CLA+ PERFORMANCE TASK RUBRIC

<table>
<thead>
<tr>
<th>SCALE</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>ANALYSIS AND PROBLEM SOLVING</td>
<td>Making a logical decision or conclusion (or taking a position) and supporting it by utilizing appropriate information (facts, ideas, computed values, or salient features) from the Document Library</td>
<td>▪ May state or imply a decision/conclusion/position</td>
<td>▪ States or implies a decision/conclusion/position</td>
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<td>▪ Provides minimal analysis as support (e.g., briefly addresses only one idea from one document) or analysis is entirely inaccurate, illogical, unreliable, or unconnected to the decision/conclusion/position</td>
<td>▪ Provides analysis that addresses a few ideas as support, some of which are inaccurate, illogical, unreliable, or unconnected to the decision/conclusion/position</td>
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<td>WRITING EFFECTIVENESS</td>
<td>Constructing organized and logically cohesive arguments. Strengthening the writer’s position by providing elaboration on facts or ideas (e.g., explaining how evidence bears on the problem, providing examples, and emphasizing especially convincing evidence)</td>
<td>▪ Does not develop convincing arguments; writing may be disorganized and confusing</td>
<td>▪ Provides limited, invalid, over-stated, or very unclear arguments; may present information in a disorganized fashion or undermine own points</td>
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<td>▪ Does not provide elaboration on facts or ideas</td>
<td>▪ Any elaboration on facts or ideas tends to be vague, irrelevant, inaccurate, or unreliable (e.g., based entirely on writer’s opinion); sources of information are often unclear</td>
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<tr>
<td>WRITING MECHANICS</td>
<td>Demonstrating facility with the conventions of standard written English (agreement, tense, capitalization, punctuation, and spelling) and control of the English language, including syntax (sentence structure) and diction (word choice and usage)</td>
<td>▪ Demonstrates minimal control of grammatical conventions with many errors that make the response difficult to read or provides insufficient evidence to judge</td>
<td>▪ Demonstrates poor control of grammatical conventions with frequent minor errors and some severe errors</td>
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<td>▪ Writes sentences that are repetitive or incomplete, and some are difficult to understand</td>
<td>▪ Consistently writes sentences with similar structure and length, and some may be difficult to understand</td>
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<td></td>
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<td>▪ Uses simple vocabulary, and some vocabulary is used inaccurately or in a way that makes meaning unclear</td>
<td>▪ Uses simple vocabulary, and some vocabulary may be used inaccurately or in a way that makes meaning unclear</td>
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<td><strong>States or implies a decision/conclusion/position</strong>&lt;br&gt;Provides some valid support, but omits or misrepresents critical information, suggesting only superficial analysis and partial comprehension of the documents&lt;br&gt;May not account for contradictory information (if applicable)</td>
<td><strong>States an explicit decision/conclusion/position</strong>&lt;br&gt;Provides valid support that addresses multiple pieces of relevant and credible information in a manner that demonstrates adequate analysis and comprehension of the documents; some information is omitted&lt;br&gt;May attempt to address contradictory information or alternative decisions/conclusions/positions (if applicable)</td>
<td><strong>States an explicit decision/conclusion/position</strong>&lt;br&gt;Provides strong support that addresses much of the relevant and credible information, in a manner that demonstrates very good analysis and comprehension of the documents&lt;br&gt;Refutes contradictory information or alternative decisions/conclusions/positions (if applicable)</td>
<td><strong>States an explicit decision/conclusion/position</strong>&lt;br&gt;Provides comprehensive support, including nearly all the relevant and credible information, in a manner that demonstrates outstanding analysis and comprehension of the documents&lt;br&gt;Thoroughly refutes contradictory evidence or alternative decisions/conclusions/positions (if applicable)</td>
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<td><strong>Provides limited or somewhat unclear arguments. Presents relevant information in each response, but that information is not woven into arguments</strong>&lt;br&gt;Provides elaboration on facts or ideas a few times, some of which is valid; sources of information are sometimes unclear</td>
<td><strong>Organizes response in a way that makes the writer’s arguments and logic of those arguments apparent but not obvious</strong>&lt;br&gt;Provides valid elaboration on facts or ideas several times and cites sources of information</td>
<td><strong>Organizes response in a logically cohesive way that makes it fairly easy to follow the writer’s arguments</strong>&lt;br&gt;Provides valid elaboration on facts or ideas related to each argument and cites sources of information</td>
<td><strong>Organizes response in a logically cohesive way that makes it very easy to follow the writer’s arguments</strong>&lt;br&gt;Provides valid and comprehensive elaboration on facts or ideas related to each argument and clearly cites sources of information</td>
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<td><strong>Demonstrates fair control of grammatical conventions with frequent minor errors</strong>&lt;br&gt;Writes sentences that read naturally but tend to have similar structure and length&lt;br&gt;Uses vocabulary that communicates ideas adequately but lacks variety</td>
<td><strong>Demonstrates good control of grammatical conventions with few errors</strong>&lt;br&gt;Writes well-constructed sentences with some varied structure and length&lt;br&gt;Uses vocabulary that clearly communicates ideas but lacks variety</td>
<td><strong>Demonstrates very good control of grammatical conventions</strong>&lt;br&gt;Consistently writes well-constructed sentences with varied structure and length&lt;br&gt;Uses varied and sometimes advanced vocabulary that effectively communicates ideas</td>
<td><strong>Demonstrates outstanding control of grammatical conventions</strong>&lt;br&gt;Consistently writes well-constructed complex sentences with varied structure and length&lt;br&gt;Displays adept use of vocabulary that is precise, advanced, and varied</td>
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