# 2005—2007
# INSTITUTIONAL
# REPORT

Grand Valley State University

[ **collegiate learning assessment** ]

# Acknowledgement

# Contents

This report presents Collegiate Learning Assessment (CLA) results for colleges and universities that tested the same students in the fall of 2005 as freshmen and in the spring of 2007 as second semester sophomores ("rising juniors"). Six sections follow this contents page:

# I. Institutional Executive Summary

The CLA measures how your students perform on tasks that require an integrated set of critical thinking, analytic reasoning, problem solving, and written communication skills. The CLA findings[1] reported here focus on student growth over time on the higher order skills measured. This is done to inform schools of how much they contributed to this growth and whether this contribution was comparable to that contributed by other institutions participating in the longitudinal study.[2] This report provides interim results for the sample of your students that tested in the fall of 2005 and again in the spring of 2007. A final report will be issued after these students are tested again as seniors in the spring of 2009. This report addresses three primary questions:

1. *How did my students, as a group, perform in the spring of 2007 after taking into account both their CLA performance as freshmen in the fall of 2005 and their incoming academic ability?*

    Given their mean SAT score (**1113**) and fall 2005 CLA score (1139) we would expect your sample of **108** students to score 1141 on the CLA in spring 2007. Their actual score of 1161 is At Expected (.4 standard error units).

2. *How much change occurred between fall 2005 and spring 2007?*

    As a group your students scored 21 points higher in the spring of 2007 than in the fall of 2005.[3] Expressed in standard deviation units as an effect size of .15, this result is about the same relative to other participating institutions.

3. *Is this change consistent across students?*

    The correlation between how your students scored in the fall of 2005 and the spring of 2007 was .49, which is about the same relative to other participating institutions.

Summary Results Table: Grand Valley State University

| | | |
|---|---|---|
| | 108 | Number of Students Tested *(in both fall 2005 and spring 2007)* |
| | 1113 | Mean SAT Score |
| | 1139 | Freshmen Mean CLA Scale Score |
| | 1141 | *Expected* Rising Juniors Mean CLA Scale Score |
| | 1161 | Rising Juniors Mean CLA Scale Score |
| At | 0.4 | Value Added Index |
| | 21 | Mean Difference between Rising Junior and Freshmen Scale Scores |
| Middle (+) | 0.15 | Effect Size |
| Middle (+) | 0.49 | Correlation of Freshmen and Rising Juniors Mean Scores |

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1        A CLA Student Data File accompanies this report for your institution to make linkages among student-level CLA results and locally-collected data (e.g., student engagement outcomes, enrollment and course-taking patterns, grades, etc.).

2        Thirty-two institutions that initiated longitudinal studies with freshmen in the fall of 2005 and tested a sufficient number of the same students in the spring of 2007.

3        Calculated as the average difference between fall 2005 and spring 2007 scores for your students. This result may not be exactly the same as the difference between the average score in fall 2005 and the average score in spring 2007.

# II. Longitudinal Cohort Summary

Not every institution participating in the CLA longitudinal study demonstrated growth in mean CLA scores of the same students tested in the fall of 2005 and in the spring of 2007. In fact, at some schools the change was negative.

The "box and whisker" plots in Figure 1 (bottom) depict the distribution of effect sizes on each CLA measure across institutions participating in the longitudinal study. An effect size is one way to measure change between two time points. For the purposes of this report, effect sizes were calculated at a school by taking the difference in mean (or average) scores of the same students when they took the CLA in the fall of 2005 and in the spring of 2007. This difference is then divided by the spread of scores (in this case, the standard deviation of student scores in the fall of 2005 for those students who also tested successfully in the spring of 2007) to place it in context.

In each plot, the extreme left hand vertical bar shows the 5th percentile, the vertical lines in the "box" itself show the 25th, 50th, and 75th percentile points, and the extreme right hand vertical line shows the 95th percentile.
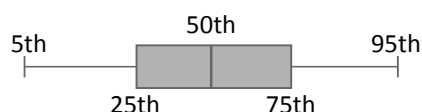


The horizontal x-axis shows the effect size. For example, on the Performance Task, about 5 percent of the schools had an effect size that was less than -0.35, about 50 percent of the schools had an effect size that was between 0.05 and 0.35, and about 5 percent of the schools had an effect size that was greater than 0.55. An inspection of these plots shows that there was a greater spread of effect sizes across schools for total scores than there was for Performance Task scores.

In the months to come, the CLA research team will work with CLA longitudinal schools (through forums, focus groups, campus visits, and case studies) to investigate the extent to which differences in other variables explain the observed performance differences on the CLA. These might include systematic differences across campuses in student motivation, incentives, academic programs (e.g., general education), "growth curves" over four years, performance expectations, and "cultures of evidence," etc.

Figure 1
Mean Score Changes between Fall 2005 and Spring 2007 by CLA Task Type
Effect Size Box and Whisker Plots
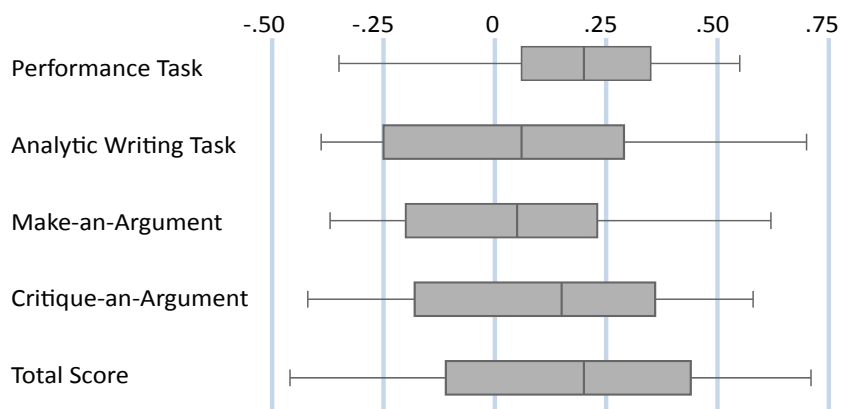
# III. CLA Tasks and Scores

The CLA uses various types of tasks, all of which require students to construct written responses to open-ended questions. There are no multiple-choice questions on the assessment.

**Performance Tasks**

Each Performance Task requires students to use an integrated set of critical thinking, analytic reasoning, problem solving, and written communication skills to answer several open-ended questions about a hypothetical but realistic situation. In addition to directions and questions, each Performance Task also has its own document library that includes a range of information sources, such as letters, memos, summaries of research reports, newspaper articles, maps, photographs, diagrams, tables, charts, and interview notes or transcripts. Students are instructed to use these materials in preparing their answers to the Performance Task's questions within the allotted 90 minutes.

The first portion of each Performance Task contains general instructions and introductory material. The student is then presented with a split screen. On the right side of the screen is a list of the materials in the document library. The student selects a particular document to view by using a pull-down menu. On the left side of the screen are a question and a response box. There is no limit on how much a student can type. When a student completes a question, he or she then selects the next question in the queue. Some of these components are illustrated below:

> Introductory Material: You advise Pat Williams, the president of DynaTech, a company that makes precision electronic instruments and navigational equipment. Sally Evans, a member of DynaTech's sales force, recommended that DynaTech buy a small private plane (a SwiftAir 235) that she and other members of the sales force could use to visit customers. Pat was about to approve the purchase when there was an accident involving a SwiftAir 235. Your document library contains the following materials:
>
> 1. Newspaper article about the accident
> 2. Federal Accident Report on in-flight breakups in single-engine planes
> 3. Internal Correspondence (Pat's e-mail to you & Sally's e-mail to Pat)
> 4. Charts relating to SwiftAir's performance characteristics
> 5. Excerpt from magazine article comparing SwiftAir 235 to similar planes
> 6. Pictures and descriptions of SwiftAir Models 180 and 235
>
> Sample Questions: Do the available data tend to support or refute the claim that the type of wing on the SwiftAir 235 leads to more in-flight breakups? What is the basis for your conclusion? What other factors might have contributed to the accident and should be taken into account? What is your preliminary recommendation about whether or not DynaTech should buy the plane and what is the basis for this recommendation?

No two Performance Tasks assess the same combination of abilities. They contexts for the tasks also vary. Some are set in a science context whereas others are set in a business, social science or humanities context. Some tasks ask students to identify and then compare and contrast the strengths and limitations of alternative hypotheses for explaining or dealing with a given problem or different points of view, courses of action, etc. To perform these and other tasks, students have to weigh different types of evidence, evaluate the credibility of various documents, spot possible bias, and identify questionable or critical assumptions.

Performance Tasks also may ask students to suggest or select a course of action to resolve conflicting or competing strategies and then provide a rationale for that decision, including why it is likely to be better than one or more other approaches. For example, students may be asked to anticipate potential difficulties or hazards that are associated with different ways of dealing with a problem including the likely short- and long-term consequences and implications of these strategies. Students may then be asked to suggest and defend one or more of these approaches. Alternatively, students may be asked to review a collection of materials or a set of options, analyze and organize them on multiple dimensions, and then defend that organization.

Performance Tasks often require students to marshal evidence from different sources; distinguish rational from emotional arguments and fact from opinion; understand data in tables and figures; deal with inadequate, ambiguous, and/or conflicting information; spot deception and holes in the arguments made by others; recognize information that is and is not relevant to the task at hand; identify additional information that would help to resolve issues; and weigh, organize, and synthesize information from several sources.

All of the Performance Tasks require students to present their ideas clearly, including justifying their points of view. For example, they might note the specific ideas or sections in the document library that support their position and describe the flaws or shortcomings in the arguments' underlying alternative approaches.

**Analytic Writing Tasks**

Students write answers to two types of essay prompts, namely: a "Make-an-Argument" question that asks them to support or reject a position on some issue; and a "Critique-an-Argument" question that asks them to evaluate the validity of an argument made by someone else. Both of these tasks measure a student's ability to articulate complex ideas, examine claims and evidence, support ideas with relevant reasons and examples, sustain a coherent discussion, and use standard written English.

A "Make-an-Argument" prompt typically presents an opinion on some issue and asks students to address this issue from any perspective they wish, so long as they provide relevant reasons and examples to explain and support their views. Students have 45 minutes to complete this essay. For example, they might be asked to explain why they agree or disagree with the following:

> There is no such thing as "truth" in the media.
>
> The one true thing about the information media is that it exists only to entertain.

A "Critique-an-Argument" prompt asks students to critique an argument by discussing how well reasoned they find it to be (rather than simply agreeing or disagreeing with the position presented). For example, they might be asked to evaluate the following argument:

> A well-respected professional journal with a readership that includes elementary school princi- pals recently published the results of a two-year study on childhood obesity. (Obese individuals are usually considered to be those who are 20 percent above their recommended weight for height and age.) This study sampled 50 schoolchildren, ages 5-11, from Smith Elementary School. A fast food restaurant opened near the school just before the study began. After two years, students who remained in the sample group were more likely to be overweight—relative to the national average. Based on this study, the principal of Jones Elementary School decided to confront her school's obesity problem by opposing any fast food restaurant openings near her school.

**Scores**

The CLA uses two sets of scores. One set is taken from the SAT and ACT. The other set of scores is generated by the CLA. The SAT and ACT scores are used to make fair comparisons across diverse institutions, i.e., comparisons that control for differences in the average academic ability of their entering freshmen classes. To facilitate reporting results across schools, ACT scores were converted (using the standard table in Appendix A) to the scale of measurement that is used to report SAT scores. These converted scores are referred to simply as SAT scores in this report. Analytic Writing Task scoring is powered by e-rater ®, an automated scoring technology developed and patented by the Educational Testing Service and licensed to CAE. The Performance Task is scored by a team of professional graders trained and calibrated on the specific task.

Students receive a single score on a CLA task because each task assesses an integrated set of critical thinking, analytic reasoning, problem solving, and written communication skills. A student's "raw" score on a Performance Task is the total number of points assigned to it by the graders. However, a student can earn more raw score points on some tasks than on others. To adjust for these differences, the raw scores on each task were converted to "scale" scores using the procedures described in Appendix B. This step allows for combining scores across different versions of a given type of task as well as across tasks, such as for the purposes of computing total scores.

# IV. Characteristics of Participating Institutions and Students

In the fall 2005 and spring 2007 testing cycles, 32 institutions ("CLA longitudinal schools") tested enough students twice (freshmen in the fall of 2005 and the same students in the spring of 2007) to provide sufficiently reliable data for the school level analyses and results presented in this report. Table 1 groups CLA longitudinal schools by Basic Carnegie Classification. Compared to the spread of four-year institutions nationally, the distribution of CLA longitudinal schools has a greater proportion of Doctorate-granting Universities, a smaller proportion of Baccalaureate Colleges and roughly the same proportion of Master's Colleges and Universities.

Table 1: Four-year institutions in the CLA longitudinal study and nation by Carnegie Classification

| Basic Carnegie Classification | Nation | | CLA longitudinal | |
|---|---|---|---|---|
| | Number | Percentage | Number | Percentage |
| Doctorate-granting Universities | 283 | 17% | 14 | 44% |
| Master's Colleges and Universities | 690 | 40% | 12 | 38% |
| Baccalaureate Colleges | 737 | 43% | 6 | 19% |
| | 1710 | 100% | 32 | 100% |

*Source: Carnegie Foundation for the Advancement of Teaching, Carnegie Classifications Data File, July 7, 2006 edition.*

Table 2 compares some important characteristics of colleges and universities across the nation with those of the CLA longitudinal schools and suggests that these CLA schools are fairly representative of institutions nationally. Exceptions include a higher proportion of public institutions, slightly higher graduation rates and SAT scores, and larger student bodies.

Table 2: Characteristics of four-year institutions in the CLA longitudinal study and nation

| School Characteristic | Nation | CLA |
|---|---|---|
| Percent public | 36% | 53% |
| Percent Historically Black College or University (HBCU) | 6% | 6% |
| Mean percentage of undergraduates receiving Pell grants | 33% | 32% |
| Mean four-year graduation rate | 36% | 36% |
| Mean six-year graduation rate | 53% | 58% |
| Mean first-year retention rate | 74% | 80% |
| Mean Barron's selectivity rating | 3.6 | 3.7 |
| Mean estimated median SAT score | 1068 | 1096 |
| Mean number of FTE undergraduate students (rounded) | 4430 | 8940 |
| Mean student-related expenditures per FTE student (rounded) | 12710 | 12780 |

*Source: College Results Online dataset, managed by the Education Trust, covers most 4-year Title IV-eligible higher education institutions in the United States. Data were obtained with permission from the Education Trust and constructed from IPEDS and other sources. Because all schools did not report on every measure in the table, the averages and percentages may be based on slightly different denominators.*

With respect to entering ability levels, students participating at the CLA longitudinal schools appeared to be generally representative of their classmates (i.e., full-time enrolled students in the spring of 2007 who began as first-time, full-time, degree-seeking freshmen in the fall of 2005), at least with respect to SAT scores as verified by school registrars at 28 schools. Specifically, across these schools, the mean SAT score of rising juniors taking the CLA was only 12 points higher than that of their classmates: 1132 versus 1120. Additionally, the correlation on these two scores was extremely high (r=0.98). These data suggest that as a group, students tested in the CLA longitudinal study in the spring of 2007 were similar to their classmates on an important measure of student "input," which increases the confidence in inferences made from results of an institution's CLA student sample to the population from which it was drawn.

# V. Institutional Tables and Figures

CLA longitudinal schools test the same individuals at three points in time: in the fall of 2005, in the spring of 2007, and in the spring of 2009. Students tested in the spring of 2007 ("rising juniors") at CLA longitudinal schools were scheduled to take a pair of Analytic Writing Tasks (namely, one Make-an-Argument and one Critique-an-Argument prompt) and a Performance Task.[1] The analyses discussed in this section focus primarily on those CLA longitudinal schools where at least 25 students received a CLA score in both fall 2005 and spring 2007 and also had an SAT score. This dual requirement was imposed to ensure that the results on a given measure were sufficiently reliable to be interpreted and that the analyses could adjust for differences among schools in the incoming abilities of the participating students.

Table 3 shows the number of students at your school who completed a CLA measure in the fall of 2005 and in the spring of 2007 and also had an SAT score. The counts in this table were used to determine whether your school met the dual requirement noted above. Counts for the Analytic Writing Task represent students who completed both the Make-an-Argument and Critique-an-Argument prompts.

Table 3: Number of your students with SAT scores and CLA scores in both fall 2005 and spring 2007

| | Number of Students |
|---|---|
| Performance Task | 152 |
| Analytic Writing Task | 109 |
| Make-an-Argument | 127 |
| Critique-an-Argument | 123 |
| Total | 108 |

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1    A longitudinal school's Analytic Writing Task scale score is the mean of its Make-an-Argument and Critique-an-Argument scale scores for those students with complete scores on both prompts. A longitudinal school's Total scale score is the mean of its Analytic Writing Task and Performance Task scale scores for those students with complete scores on both tasks types.

## Figure 2
## Relationship Between Freshmen Composite Score and Rising Junior Performance
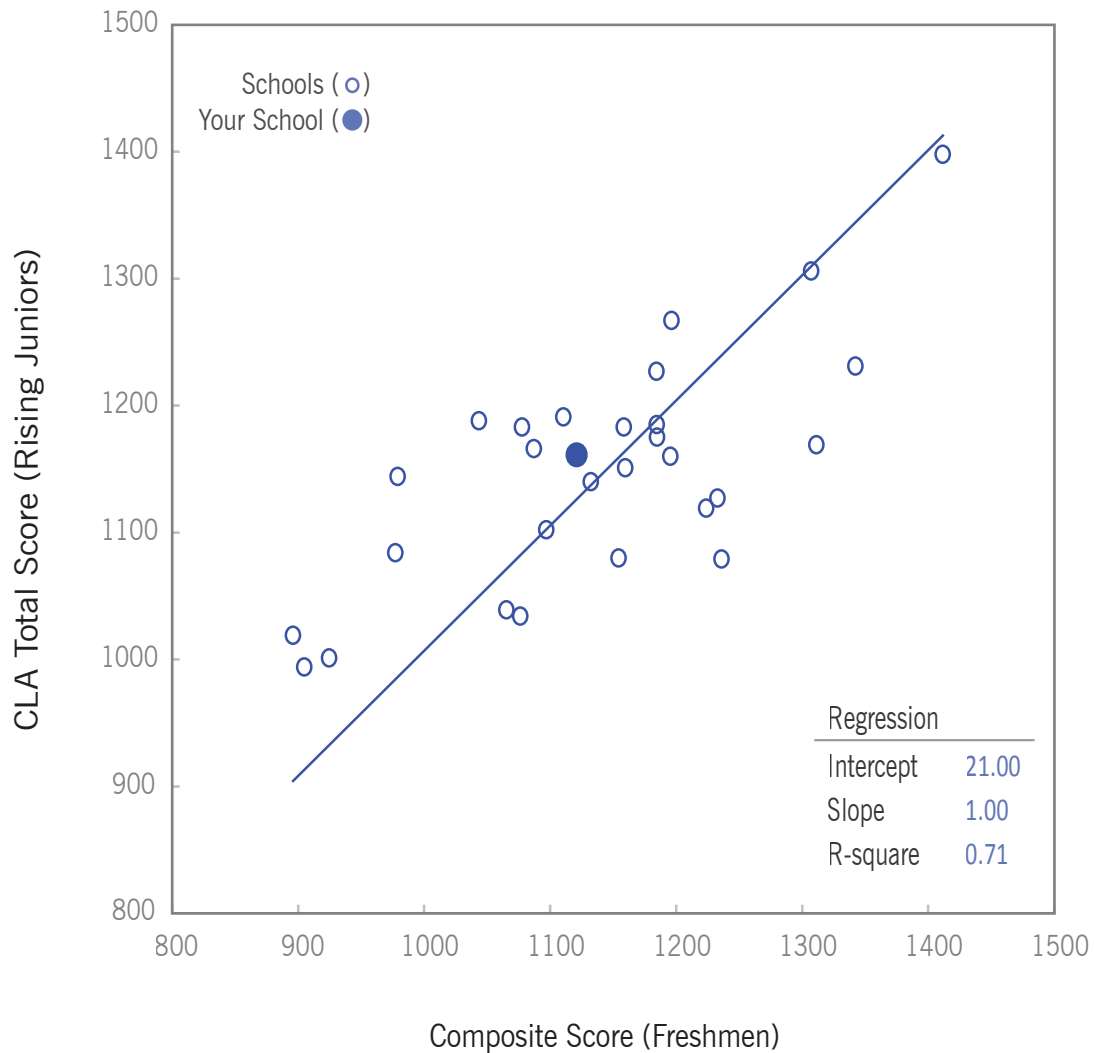


The vertical y-axis in Figure 2 (above) shows a school's mean CLA Total score for rising juniors. The horizontal axis shows a school's mean CLA Composite score for freshmen. The composite score adjusts the relationship between the CLA rising junior and freshmen scores for SAT scores.  It was created by taking a weighted combination of the school's mean SAT score and mean freshmen CLA Total score.[1] The students used to create this composite were the same ones whose scores were used to compute the mean CLA Total score for rising juniors at that school (freshmen who did not take the CLA as rising juniors were therefore excluded from the analysis). A school's data point is above this line if its rising juniors did better on the CLA than what would be expected; i.e., relative to their mean SAT and freshmen CLA scores.

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1          The composite score was created from a regression analysis that weighted the SAT and freshmen CLA scores in a way that yielded the best fitting straight line through the data. See Appendix C (page 16) for more information.

Table 4 indicates whether the rising juniors scored above, at, or below what would be expected given their mean CLA Composite score. Results are expressed in the form of index scores that correspond to standard errors. Colleges with actual scores between -1.00 and +1.00 standard errors from their expected scores are categorized as being At Expected. Institutions with actual scores greater than one standard error (but less than two standard errors) from their expected scores are in the Above Expected or Below Expected categories (depending on the direction of the deviation). The schools with actual scores greater than two standard errors from their expected scores are in the Well Above Expected or Well Below Expected categories.

Table 4: Value added index and performance level results from your school

|  | Value Added Index | Performance Level |
|---|---|---|
| Performance Task | 0.1 | At |
| Analytic Writing Task | 0.3 | At |
| Make-an-Argument | 0.2 | At |
| Critique-an-Argument | 0.4 | At |
| Total | 0.4 | At |

Table 5 provides summary statistical data on the freshmen and rising juniors who participated at your school. These data represent only those students who were tested both in the fall of 2005 and in the spring of 2007.  The last two columns of Table 5 are particularly important. The "effect size" column indicates how much change occurred between fall 2005 and spring 2007. The larger the positive effect size, the greater the improvement. Effect sizes greater than 0.50 and 1.00 are generally considered "large" and "very large," respectively. Negative effect sizes would indicate that the students scored higher as freshmen than they did as rising juniors. The last column of Table 5 shows the correlation between a student's freshmen and rising junior scores. A high positive correlation indicates that the students who scored relatively highly as freshmen (relative to their classmates) also tended to score relatively highly as rising juniors. In other words, the improvement between freshmen and rising junior scores was fairly consistent across students.  A correlation close to 0.00 indicates that those who did well on the CLA as freshmen may or may not have done well on it as rising juniors.  For these purposes, correlations below 0.25 are considered low whereas correlations over 0.50 are considered high and those over 0.70 are very high.

Table 5:  Comparison of students scores as Freshmen and Rising Juniors for your school

|  | | Freshmen | | Rising Junior | | Difference | | Summary Statistics | |
|---|---|---|---|---|---|---|---|---|---|
|  | Number of Students | Mean Score | Standard Deviation | Mean Score | Standard Deviation | Mean Score* | Standard Deviation | Effect Size | Mean Score Correlation |
| Performance Task | 152 | 1155 | 166 | 1158 | 172 | 2 | 194 | 0.01 | 0.35 |
| Analytic Writing Task | 109 | 1107 | 133 | 1149 | 134 | 42 | 143 | 0.26 | 0.42 |
| Make-an-Argument | 127 | 1104 | 154 | 1132 | 143 | 28 | 176 | 0.15 | 0.30 |
| Critique-an-Argument | 123 | 1091 | 172 | 1157 | 162 | 67 | 191 | 0.36 | 0.35 |
| Total | 108 | 1139 | 122 | 1161 | 122 | 21 | 123 | 0.15 | 0.49 |

*Mean Difference between Rising Junior and Freshmen Scale Scores*

Table 6 shows how the results at your school compare to those at other longitudinal schools. For example, was the change in Performance Task scores over the two year study period at your school higher, lower, or about the same as that observed at the other longitudinal schools? It also shows whether the correlation in scores between these two testing times was higher or lower or about the same at your school as it was at the other schools. The direction of the effect size and correlation ( + or - ) appears in parentheses after the performance categories, of which there are three: Low (bottom third), Middle (middle third), and High (upper third).

Table 6: Comparison of your school's Effect Size and
Mean Score Correlation with Other Schools

| | Performance Categories | |
|---|---|---|
| | Effect Size | Mean Score Correlation |
| Performance Task | Low (+) | High (+) |
| Analytic Writing Task | Middle (+) | Middle (+) |
| Make-an-Argument | Middle (+) | Low (+) |
| Critique-an-Argument | High (+) | Middle (+) |
| Total | Middle (+) | Middle (+) |

Table 7 below provides summary statistics—counts, means, 25th and 75th percentiles, and standard deviations—for students (at all schools) with SAT scores and complete CLA scores in the fall of 2005 and in the spring of 2007. The unit of analysis is students. Table 7 also summarizes results for students with complete CLA scores in only the fall of 2005 ("Freshmen Tested Once"). "Freshmen Tested Twice" refers to the fall 2005 performance of students who tested again in the spring of 2007.

Table 7: Summary statistics for all students participating in the longitudinal study

|  | Freshmen Tested Once | | | | |
|  | Number of Students | 25th Percentile | Mean Scale Score | 75th Percentile | Standard Deviation |
|---|---|---|---|---|---|
| Performance Task | 5851 | 949 | 1063 | 1187 | 180 |
| Analytic Writing Task | 4005 | 977 | 1072 | 1196 | 155 |
| Make-an-Argument | 4627 | 942 | 1065 | 1225 | 182 |
| Critique-an-Argument | 4404 | 869 | 1062 | 1167 | 176 |
| Total | 3979 | 982 | 1082 | 1174 | 137 |
| SAT Score | 5844 | 930 | 1060 | 1190 | 188 |

|  | Freshmen Tested Twice | | | | |
|  | Number of Students | 25th Percentile | Mean Scale Score | 75th Percentile | Standard Deviation |
|---|---|---|---|---|---|
| Performance Task | 3309 | 985 | 1127 | 1250 | 184 |
| Analytic Writing Task | 2190 | 1047 | 1130 | 1267 | 159 |
| Make-an-Argument | 2596 | 942 | 1122 | 1225 | 183 |
| Critique-an-Argument | 2518 | 1018 | 1125 | 1316 | 187 |
| Total | 2177 | 1046 | 1142 | 1235 | 140 |
| SAT Score | 3329 | 1010 | 1134 | 1270 | 188 |

|  | Rising Juniors | | | | |
|  | Number of Students | 25th Percentile | Mean Scale Score | 75th Percentile | Standard Deviation |
|---|---|---|---|---|---|
| Performance Task | 3309 | 1012 | 1157 | 1277 | 207 |
| Analytic Writing Task | 2190 | 1047 | 1136 | 1267 | 154 |
| Make-an-Argument | 2596 | 942 | 1123 | 1225 | 178 |
| Critique-an-Argument | 2518 | 1018 | 1137 | 1316 | 174 |
| Total | 2177 | 1048 | 1158 | 1260 | 153 |
| SAT Score | 3329 | 1010 | 1134 | 1270 | 188 |

Table 8 below provides summary statistics—counts, means, 25th and 75th percentiles, and standard deviations—for students (at all schools) with SAT scores and complete CLA scores both in the fall of 2005 and in the spring of 2007. The unit of analysis is schools.

Table 8: Summary statistics for all schools participating in the longitudinal study

| | Freshmen Tested Twice | | | | |
|---|---|---|---|---|---|
| | Number of Schools | 25th Percentile | Mean Scale Score | 75th Percentile | Standard Deviation |
| Performance Task | 32 | 1048 | 1112 | 1167 | 85 |
| Analytic Writing Task | 29 | 1065 | 1115 | 1161 | 83 |
| Make-an-Argument | 30 | 1076 | 1110 | 1177 | 89 |
| Critique-an-Argument | 29 | 1050 | 1113 | 1173 | 85 |
| Total | 29 | 1073 | 1126 | 1171 | 76 |
| SAT Score | 32 | 1045 | 1116 | 1193 | 129 |

| | Rising Juniors | | | | |
|---|---|---|---|---|---|
| | Number of Schools | 25th Percentile | Mean Scale Score | 75th Percentile | Standard Deviation |
| Performance Task | 32 | 1068 | 1148 | 1195 | 102 |
| Analytic Writing Task | 29 | 1069 | 1129 | 1188 | 88 |
| Make-an-Argument | 30 | 1080 | 1119 | 1176 | 93 |
| Critique-an-Argument | 29 | 1066 | 1130 | 1182 | 91 |
| Total | 29 | 1086 | 1148 | 1185 | 90 |
| SAT Score | 32 | 1045 | 1116 | 1193 | 129 |

Table 9 below provides summary statistics—counts, means, 25th and 75th percentiles, and standard deviations—for students (at your school) with SAT scores and complete CLA scores both in the fall of 2005 and in the spring of 2007. Table 9 also summarizes results for students with complete CLA scores in only the fall of 2005 ("Freshmen Tested Once"). "Freshmen Tested Twice" refers to the fall 2005 performance of students who tested again in the spring of 2007.

Table 9: Summary statistics for students at your school participating in the longitudinal study

| | Freshmen Tested Once | | | | |
| --- | --- | --- | --- | --- | --- |
| | Number of Students | 25th Percentile | Mean Scale Score | 75th Percentile | Standard Deviation |
| Performance Task | 165 | 1025 | 1118 | 1229 | 153 |
| Analytic Writing Task | 126 | 980 | 1077 | 1196 | 134 |
| Make-an-Argument | 141 | 942 | 1074 | 1225 | 155 |
| Critique-an-Argument | 142 | 869 | 1062 | 1167 | 160 |
| Total | 126 | 1015 | 1100 | 1182 | 118 |
| SAT Score | 163 | 1030 | 1110 | 1180 | 126 |

| | Freshmen Tested Twice | | | | |
| --- | --- | --- | --- | --- | --- |
| | Number of Students | 25th Percentile | Mean Scale Score | 75th Percentile | Standard Deviation |
| Performance Task | 152 | 1035 | 1155 | 1251 | 166 |
| Analytic Writing Task | 109 | 984 | 1107 | 1196 | 133 |
| Make-an-Argument | 127 | 942 | 1104 | 1225 | 154 |
| Critique-an-Argument | 123 | 1018 | 1091 | 1167 | 172 |
| Total | 108 | 1054 | 1139 | 1229 | 122 |
| SAT Score | 153 | 1030 | 1113 | 1220 | 129 |

| | Rising Juniors | | | | |
| --- | --- | --- | --- | --- | --- |
| | Number of Students | 25th Percentile | Mean Scale Score | 75th Percentile | Standard Deviation |
| Performance Task | 152 | 1053 | 1158 | 1259 | 172 |
| Analytic Writing Task | 109 | 1051 | 1149 | 1271 | 134 |
| Make-an-Argument | 127 | 1084 | 1132 | 1225 | 143 |
| Critique-an-Argument | 123 | 1018 | 1157 | 1316 | 162 |
| Total | 108 | 1082 | 1161 | 1244 | 122 |
| SAT Score | 153 | 1030 | 1113 | 1220 | 129 |

# Appendix A
# Standard ACT to SAT Conversion Table

To facilitate reporting results across schools, ACT scores were converted (using the standard table below) to the scale of measurement that is used to report SAT scores.

| ACT | to | SAT |
|-----|----|-----|
| 36 | | 1600 |
| 35 | | 1580 |
| 34 | | 1520 |
| 33 | | 1470 |
| 32 | | 1420 |
| 31 | | 1380 |
| 30 | | 1340 |
| 29 | | 1300 |
| 28 | | 1260 |
| 27 | | 1220 |
| 26 | | 1180 |
| 25 | | 1140 |
| 24 | | 1110 |
| 23 | | 1070 |
| 22 | | 1030 |
| 21 | | 990 |
| 20 | | 950 |
| 19 | | 910 |
| 18 | | 870 |
| 17 | | 830 |
| 16 | | 780 |
| 15 | | 740 |
| 14 | | 680 |
| 13 | | 620 |
| 12 | | 560 |
| 11 | | 500 |

Sources:

"Concordance Between ACT Assessment and Recentered SAT I Sum Scores" by N.J. Dorans, C.F. Lyu, M. Pommerich, and W.M. Houston (1997), College and University, 73, 24-31; "Concordance between SAT I and ACT Scores for Individual Students" by D. Schneider and N.J. Dorans, Research Notes (RN-07), College Entrance Examination Board: 1999; "Correspondences between ACT and SAT I Scores" by N.J. Dorans, College Board Research Report 99-1, College Entrance Examination Board: 1999; ETS Research Report 99-2, Educational Testing Service: 1999.

# Appendix B

## Procedures for Converting Raw Scores to Scale Scores

There is a separate scoring guide for each Performance Task and the maximum number of points a student can earn may differ across Performance Tasks. To adjust for these differences in maximum possible scores, reader-assigned "raw" scores on a Performance Task were converted (linear transformation) to "scale" scores, just as is done with SAT and ACT scores by their respective organizations.

This process involved transforming the raw scores on a measure to a score distribution that had the same mean and standard deviation as the SAT scores of the students who took that measure. This process also was used with the Analytic Writing Tasks.

This type of scaling essentially involves assigning the highest raw score that was earned on a task by any freshman the same value as the highest SAT score of any freshman who took that task (i.e., not necessarily the same person). The second highest raw score is then assigned the same value as the second highest SAT score, and so on.

As a result of the scaling process, we can combine scores from different tasks to compute a school's mean Performance Task scale score. The same procedures also were used to compute scale scores for the Analytic Writing Task.

## Appendix C

## Equations Used to Estimate Spring 2007 CLA Scores

## on the Basis of Mean SAT Scores and Fall 2005 CLA Scores

| | Intercept | Slope | Standard Error | R-square | Coefficient Weights | |
|---|---|---|---|---|---|---|
| | | | | | SAT | 2005 CLA |
| Performance Task | -4 | 1.00 | 46.3 | 0.80 | 0.116 | 0.919*** |
| Analytic Writing Task | 228 | 1.00 | 58.2 | 0.58 | -0.011 | 0.819** |
| Make-an-Argument | 240 | 1.00 | 61.9 | 0.57 | -0.006 | 0.798*** |
| Critique-an-Argument | 248 | 1.00 | 62.8 | 0.54 | 0.009 | 0.784** |
| Total Score | 21 | 1.00 | 49.4 | 0.71 | -0.008 | 1.01*** |

*\* p<.05    \*\* p<.01    \*\*\* p<.001*

# Appendix D
## List of CLA Longitudinal Schools

Auburn University, AL

Belmont University, TN

Bowling Green State University, OH

California State Polytechnic University - Pomona, CA

California State University - Northridge, CA

Carleton College, MN

Central Michigan University, MI

Cleveland State University, OH

CUNY City College, NY

CUNY Herbert H. Lehman College, NY

Fayetteville State University, NC

Grand Valley State University, MI

Loyola University of Chicago, IL

Macalester College, MN

North Carolina A&T State University, NC

Northern Arizona University, AZ

Ohio Northern University, OH

Pace University, NY

Saint Olaf College, MN

Saint Xavier University, IL

Spelman College, GA

Syracuse University, NY

The George Washington University, DC

The Ohio State University, OH

University of California, Riverside, CA

University of Charleston, WV

University of North Carolina at Charlotte, NC

University of Saint Thomas, TX

University of San Diego, CA

University of the Pacific, CA

University of Wyoming, WY

Wagner College, NY

Winston-Salem State University, NC

Winthrop University, SC

Wofford College, SC

# Appendix E
# CLA Student Data File

In tandem with this report, we provide a CLA Student Data File, which includes over 80 variables across three categories: (1) CLA scores and identifiers; (2) information provided/verified by the registrar; and (3) self-reported information from students in their CLA on-line profile:

We provide student-level information for linking with other data you collect (e.g., from NSSE, CIRP, portfolios, local assessments, course-taking patterns, participation in specialized programs, etc.) to help you hypothesize about campus-specific factors related to overall institutional performance. Student-level scores are not designed to be diagnostic at the individual level and should be considered as only one piece of evidence about a student's skills.

## CLA Scores and Identifiers

- Fall 2005 and Spring 2007 CLA scores for Performance Task, Analytic Writing Task, Make-an-Argument, Critique-an-Argument, and Total CLA Score (depending on the number of tasks taken and completeness of responses):

  - CLA scale scores;

  - Student Performance Level categories (i.e., well below expected, below expected, at expected, above expected, well above expected) if CLA scale score and SAT equivalent scores are available;

  - Percentile Rank in the CLA (among students in the same class year; based on scale score); and

  - Percentile Rank at School (among students in the same class year; based on scale score).

- e-rater® raw scores for Make-an-Argument and/or Critique-an-Argument

- Unique CLA numeric identifiers

- Name (first, middle initial, last), E-mail address, SSN/Student ID

- Year, Administration (Fall or Spring), Type of Test (90 or 180-minute), Date of test

## Registrar Data

- Class Standing

- High School GPA

- Freshman Year GPA

- Cumulative Undergraduate GPA (through fall 2006)

- Transfer Student Status

- Credit Hours (only for coursework at institution) (through fall 2006)

- Total Credit Hours (through fall 2006)

- Credit Hours (at institution) as percent (%) of total credits needed for graduation (through fall 2006)

- SAT Equivalent Score (SAT composite or converted ACT composite)

- SAT I Scores

- ACT Scores

## Self-Reported Data

- Student Class: Freshman/First-Year (1) Sophomore (2) Junior (3) Senior (4) Unclassified (5) Other (6)

- Age

- Gender

- Race/Ethnicity

- Primary and Secondary Academic Major (34 categories)

- Field of Study (6 categories; based on primary academic major)

- English as primary language

- Total years at school

- Attended school as Freshman, Sophomore, Junior, Senior

# collegiate
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# assessment