University of
Wisconsin La
Crosse

2007–2008 CLA TECHNICAL APPENDICES

Contents

These Technical Appendices report CLA outcomes in detail and technical information underpinning your results.

A   CLA Outcomes

In Table 1 below , Parts A (Freshmen tested in fall 2007) and B (Seniors tested in spring 2008) provide information on how many students completed the CLA (column 1) and their mean ability test scores (column 2), as well as their expected (column 3) and actual (column 4) CLA scores. "Ability test" scores are hereinafter labeled "SAT" and refer to (1) SAT math + verbal, (2) ACT Composite or (3) Scholastic Level Exam scores on the SAT scale. Column 5 reports the percentile rank for your school's actual mean CLA scores. Thus, this column indicates how your school's mean CLA scores compare to mean CLA scores at other schools BEFORE there is any adjustment for the students' SAT scores. There is one set of percentiles for freshmen and another set for seniors. Deviation scores (column 6) quantify the difference between actual and expected scores in standard error units. Column 7 reports percentile ranks for deviation scores (the same as those presented in the Institutional Report). Performance Levels (column 8) are based on these percentile ranks and assigned as follows: 0-9th percentile (Well Below Expected), 10-29th percentile (Below Expected), 30-69th percentile (At Expected), 70-89th percentile (Above Expected), and 90-99th percentile (Well Above Expected). An "N/A" indicates that there were not enough students with both CLA and SAT scores to compute a reliable score for your institution. Part C (Value-added Estimates), column 1, reports difference scores, which are the deviation scores for seniors minus the deviation scores for freshmen. Difference scores are converted to percentile ranks (column 2) and then performance levels (column 3) are assigned using the above ranges.

Table 1: CLA Outcomes

Part A: Freshmen tested in fall 2007

	Student Count (1)	Mean SAT Score (2)	Expected CLA Score (3)	Actual CLA Score (4)	Percentile Rank (5)	Deviation Score (6)	Percentile Rank (7)	Performance Level (8)
Total CLA Score	112	1128	1116	1103	67	-0.4	39	At
Performance Task	56	1113	1099	1076	59	-0.6	35	At
Analytic Writing Task	56	1143	1129	1129	78	0.0	51	At
Make-an-Argument	56	1143	1132	1156	82	0.6	71	Above
Critique-an-Argument	56	1143	1125	1103	69	-0.6	27	Below

Part B: Seniors tested in spring 2008

	Student Count (1)	Mean SAT Score (2)	Expected CLA Score (3)	Actual CLA Score (4)	Percentile Rank (5)	Deviation Score (6)	Percentile Rank (7)	Performance Level (8)
Total CLA Score	101	1152	1218	1269	86	1.4	92	Well Above
Performance Task	51	1161	1218	1276	85	1.2	86	Above
Analytic Writing Task	50	1142	1217	1262	84	1.2	89	Above
Make-an-Argument	50	1142	1211	1233	74	0.5	70	Above
Critique-an-Argument	50	1142	1221	1291	90	1.8	97	Well Above

Part C: Value-added Estimates

	Difference Score (1)	Percentile Rank (7)	Performance Level (8)
Total CLA Score	1.8	96	Well Above
Performance Task	1.8	94	Well Above
Analytic Writing Task	1.2	86	Above
Make-an-Argument	-0.1	50	At
Critique-an-Argument	2.4	98	Well Above

The results in Table 1 represent schools where at least 25 students received a CLA score and also had an SAT score. This dual requirement was imposed so that the analyses could adjust for differences among schools in the incoming abilities of the students participating in the CLA.

Figure 1: Relationship between CLA Performance and Incoming Academic Ability
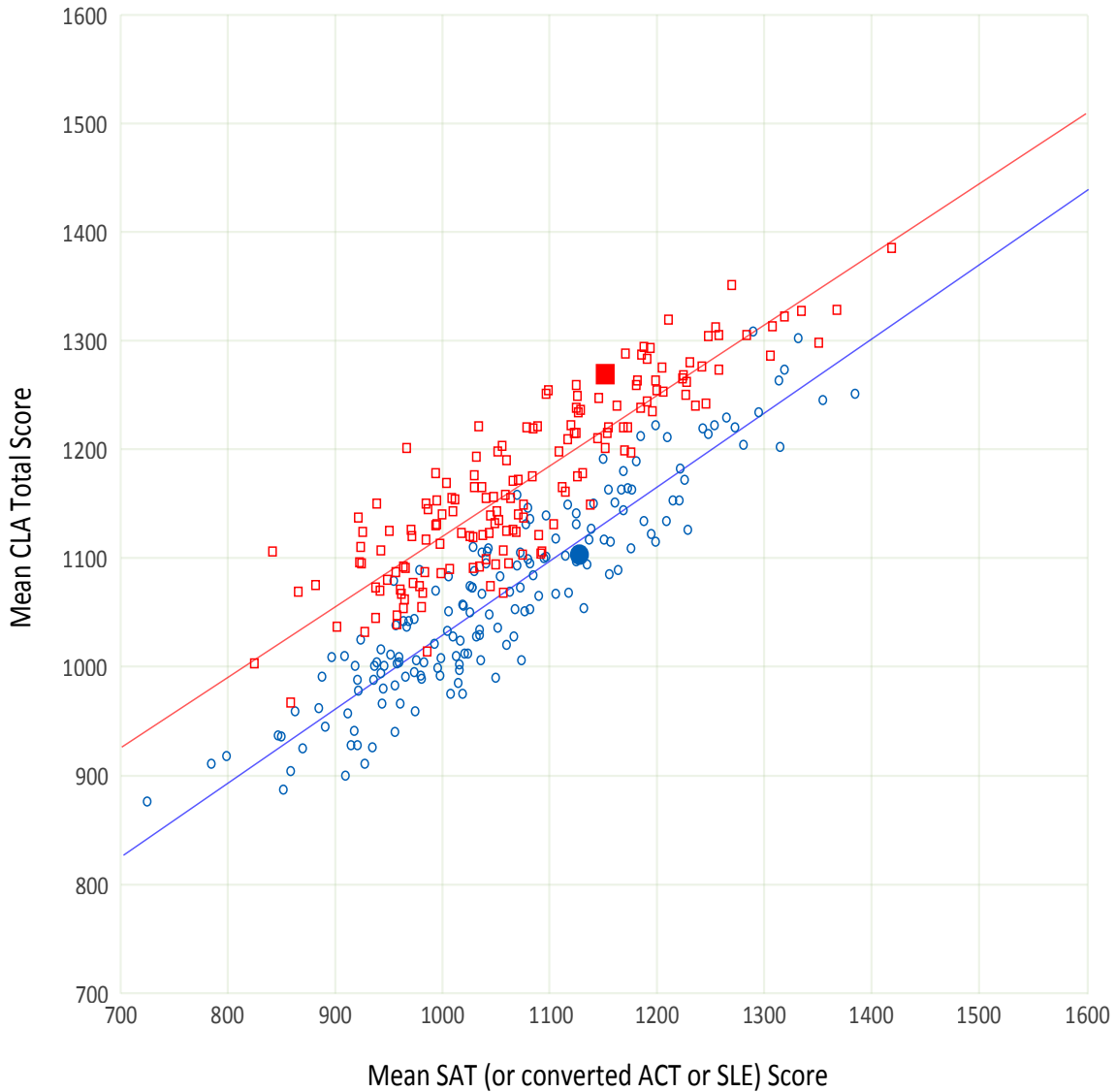
In Figure 1 data are shown for 176 schools. The diagonal lines (blue for freshmen and red for seniors) show the typical relationship between an institution's mean SAT score and its mean CLA score for freshmen and seniors, respectively. The solid blue circle and solid red square correspond to your school. Schools above the line scored higher than expected, whereas those below the line did not do as well as expected. The difference between a school's actual mean score and its expected mean score is its deviation score as reported in Table 1 (Parts A and B) on the previous page. Our value-added estimate is the difference score (see Table 1 Part C), which is the deviation score for seniors minus the deviation score for freshmen. Appendix H contains the equations that were used to estimate a school's expected mean CLA score on the basis of its students' mean SAT score. Appendix H also contains the expected CLA score for a school's freshmen and seniors for various mean SAT scores.

Tables 2, 3 and 4 (below) provide greater detail on CLA performance, including the spread of scores, at your school and all schools. These tables present summary statistics including counts, means, 25th and 75th percentiles, and standard deviations. Units of analysis are students for Tables 2 and 3 and schools for Table 4. These CLA scale scores represent students with and without SAT scores and thus may differ from those in Table 1. Additionally, the 25-student threshold was applied to the schools included in Table 4 for CLA outcomes.

Table 2: Supplemental CLA outcomes for freshmen and seniors tested at your school

	Freshmen at your school					Seniors at your school				
	Number of Students	25th Percentile	Mean CLA Score	75th Percentile	Standard Deviation	Number of Students	25th Percentile	Mean CLA Score	75th Percentile	Standard Deviation
Performance Task	56	987	1076	1199	169	51	1183	1276	1399	170
Analytic Writing Task	57	1037	1125	1188	134	51	1178	1265	1349	111
Make-an-Argument	57	1059	1152	1224	163	51	1106	1234	1318	145
Critique-an-Argument	57	966	1097	1200	171	51	1199	1295	1399	137
SAT Score	112	1070	1128	1180	91	101	1070	1151	1220	93

Table 3: Supplemental CLA outcomes for freshmen and seniors tested at all schools

	Freshmen at all schools					Seniors at all schools				
	Number of Students	25th Percentile	Mean CLA Score	75th Percentile	Standard Deviation	Number of Students	25th Percentile	Mean CLA Score	75th Percentile	Standard Deviation
Performance Task	12026	915	1064	1186	194	8071	1019	1164	1300	204
Analytic Writing Task	10539	970	1077	1172	150	7872	1073	1182	1285	156
Make-an-Argument	10750	954	1075	1180	179	7936	1046	1177	1295	185
Critique-an-Argument	10645	939	1075	1191	179	7925	1065	1185	1303	187
SAT Score	18989	940	1061	1180	181	14193	960	1095	1220	184

Table 4: Supplemental CLA outcomes for schools that tested freshmen and seniors

	Schools that tested freshmen					Schools that tested seniors				
	Number of Schools	25th Percentile	Mean CLA Score	75th Percentile	Standard Deviation	Number of Schools	25th Percentile	Mean CLA Score	75th Percentile	Standard Deviation
Performance Task	161	982	1051	1128	98	148	1080	1157	1232	95
Analytic Writing Task	157	1017	1072	1123	82	142	1120	1176	1234	78
Make-an-Argument	159	1014	1074	1121	88	143	1107	1170	1231	83
Critique-an-Argument	157	1009	1068	1121	84	144	1119	1178	1243	80
SAT Score	168	961	1053	1138	123	161	994	1079	1163	115

In the fall 2007 and/or spring 2008 testing cycles, 176 institutions ("CLA schools") tested enough freshmen and seniors to provide sufficiently reliable data for the school level analyses and results presented in this report. Table 5 shows CLA schools grouped by Basic Carnegie Classification. The spread of schools corresponds well with that of the 1,713 four-year institutions across the nation. Table 5 numbers do not include 3 Special Focus Institutions and 1 international campus of an institution based in the United States.

Table 5: Four-year institutions in the CLA and nation by Carnegie Classification

Carnegie Classification	Nation		CLA	
	Number	Percentage	Number	Percentage
Doctorate-granting Universities	282	16%	35	20%
Master's Colleges and Universities	664	39%	86	50%
Baccalaureate Colleges	767	45%	51	30%
	1713		172	

Source: Carnegie Foundation for the Advancement of Teaching, Carnegie Classifications Data File, June 11, 2008.

Table 6 provides comparative statistics on some important characteristics of colleges and universities across the nation with those of the CLA schools, and suggests that these CLA schools are fairly representative of institutions nationally. Percent public and mean number of FTE undergraduates are exceptions.

Table 6: Four-year institutions in the CLA and nation by key school characteristics

School Characteristic	Nation	CLA
Percent public	37%	56%
Percent Female	58%	58%
Percent Historically Black College or University (HBCU)	5%	3%
Mean percentage of undergraduates receiving Pell grants	34%	31%
Mean four-year graduation rate	36%	33%
Mean six-year graduation rate	52%	52%
Mean first-year retention rate	73%	75%
Mean Barron's selectivity rating	3.4	3.3
Mean estimated median SAT score	1067	1060
Mean number of FTE undergraduate students (rounded)	4320	6923
Mean student-related expenditures per FTE student (rounded)	$12,365	$10,748

Source: College Results Online dataset, managed by and obtained with permission from the Education Trust, covers most 4-year Title IV-eligible higher-education institutions in the United States. Data were 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.

CLA-participating students appeared to be generally representative of their classmates with respect to entering ability levels as measured by SAT scores. Specifically, across institutions, the average SAT score of CLA freshmen (as verified by the registrar) was only 11 points higher than that of the entire freshman class*: 1057 versus 1046 (n=166). Similarly, the average SAT score of CLA seniors was only 16 points higher than that of the entire senior class**: 1084 versus 1068 (n=156). The correlation between the average SAT score of CLA freshmen and their classmates was extremely high (r=.94) (n=166), as was the corresponding result for seniors (r=.93) (n=156). These data suggest that as a group, CLA freshmen and CLA seniors were similar to all freshmen and all seniors at participating schools. This correspondence increases confidence in the inferences that can be made from the results with the samples of students that were tested at a school to all the freshmen and seniors at that institution.

* As reported by 166 school registrars in response to a fall 2007 request for information. * As reported by 156 school registrars in response to a spring 2008 request for information.

C   Examining Performance Across Task Types

CLA results operate as a signaling tool of overall institutional performance on tasks that measure higher order skills holistically. However, the three types of CLA tasks—Performance, Make-an-Argument and Critique-an-Argument—differ slightly in the combination of skills necessary to perform well. Indeed, some schools score significantly lower on one type than on another. Examining performance across CLA task types can serve as an initial diagnostic exercise. Specifically, cases of performance Well Below Expected or Below Expected on a particular task type indicate that students are not demonstrating the expected level of skill (given their SAT scores) at:

Analyzing complex, realistic scenarios (Performance Task)

Synthesizing information from multiple sources; recognizing conflicting evidence, weighing the credibility of different sources of evidence; identifying logical fallacies, interpreting data, tables, and figures correctly; drawing reasonable and logical inferences from the available information; developing sound conclusions based on all available evidence; and utilizing the most relevant and credible evidence available to justify their conclusion.

Writing a persuasive, analytic essay to support a position on an issue (Make-an-Argument)

Establishing a thesis or a position on an issue; maintaining the thesis throughout the essay; supporting the thesis with relevant and persuasive examples (e.g., from personal experience, history, art, literature, pop culture, or current events); anticipating and countering opposing arguments to the position, fully developing ideas, examples, and arguments; crafting an overall response that generates interest, provokes thought, and persuades the reader; organizing the structure of the essay (e.g., paragraphing, ordering of ideas and sentences within paragraphs); employing transitions and varied sentence structure to maintain the flow of the argument; and utilizing sophisticated grammar and vocabulary.

Critiquing written arguments (Critique-an-Argument)

Identifying a variety of logical flaws or fallacies in a specific argument; explaining how or why the logical flaws affect the conclusions in that argument; and presenting their critique in a written response that is a grammatically correct, organized, well-developed, logically sound, and neutral in tone.

We encourage schools to examine the consistency of differences across task types by looking at consecutive years of CLA results.

D   Description of 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.

Performance Task

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. Some ask students to identify and then compare and contrast the strengths and limitations of alternative hypotheses, points of view, courses of action, etc. To perform these and other tasks, students may 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 Task

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 (on next page):

> 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 principals 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

To facilitate reporting results across schools, ACT scores were converted (using the ACT-SAT crosswalk in Appendix G) to the scale of measurement used to report SAT scores. At institutions where a majority of students did not have ACT or SAT scores (e.g., two-year institutions and open admission schools), we embedded the Scholastic Level Exam (SLE), a short-form cognitive ability measure, into the CLA testing. The SLE is produced by Wonderlic, Inc. SLE scores were converted to SAT scores using data from 1,148 students participating in spring 2006 that had both SAT and SLE scores. These converted scores (both ACT to SAT and SLE to SAT) are referred to simply as SAT scores.

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.

Both the Performance Tasks and Analytic Writing Tasks are scored by teams of professional graders trained and calibrated on the specific task type. A student's "raw" score on a CLA 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 E. This step allows for combining scores across different versions of a given type of task as well as across tasks, such as for the purpose of computing total scores.

E	Scaling Procedures

Each Performance Task and Analytic Writing Task has a unique scoring rubric, and the maximum number of reader assigned raw score points differs across tasks. Consequently, a given reader-assigned raw score, such as 15 points, may be a relatively high score on one task but a low score on another task. To adjust for such differences, reader-assigned "raw" scores on the different tasks are converted to a common scale of measurement. This process results in "scale" scores that reflect comparable levels of proficiency across tasks. For example, a given CLA scale score indicates about the same percentile rank regardless of the task on which it was earned. This feature of the CLA scale scores allows combining scores from different tasks to compute a school's mean scale score for each task type as well as a total scale score across types.

To convert the reader assigned raw scores to scale scores, the raw scores on a measure were transformed to a score distribution that had the same mean and standard deviation as the SAT scores of the freshmen who took that measure. This type of scaling maintains the relative standing of a student on a task relative to other students who took that task. For example, the student with the highest raw score on a task will also have the highest scale score on that task, the student with the next highest raw score will be assigned the next highest scale score, and so on.

This type of scaling generally results in the highest raw score earned on a task receiving a scale score of approximately the same value as the maximum SAT score of any freshman who took that task. Similarly, the lowest raw score earned on a task would be assigned a scale score value that is approximately the same as the lowest SAT score of any freshman who took that task. On very rare occasions, a student may achieve an exceptionally high or low raw score (i.e., well above or below the other students taking that task). When this occurs, it results in assigning a student a scale score that is outside of the normal SAT range. Prior to the spring of 2007, scores were capped at 1600 (the maximum allowable on the SAT). Capping was discontinued starting in fall 2007.

In the past, CAE revised its scaling equations each fall. However, many institutions would like to make year-to-year comparisons (i.e., as opposed to just fall to spring). To facilitate this activity, in fall 2007 CAE began using the same scaling equations it developed for the fall 2006 administration. As a result of this policy, a given raw score on a task will receive the same scale score regardless of when the student took the task.

F　　　Retention and Graduation Rate Outcomes

The CLA paradigm represents a radical departure from the use of traditional measures of institutional performance such as graduation and retention rates. The CLA as a measurement tool employs new task types, focuses on growth and reports results in a relative-to-expected fashion. Table 7 facilitates the examination of CLA outcomes as compared to more traditional institutional outcome measures (in this case, retention and graduation rates) by reporting these non-CLA outcomes using a CLA-like relative-to-expected approach. The results below show the extent to which the actual retention and graduation rates at your school were consistent with what would be expected given the characteristics of your students and institution. We calculate deviation scores, convert them to percentile ranks, and report performance levels.

Table 7: Retention and graduation rate outcomes

	Actual Value	Expected Value	Deviation Score	Percentile Rank	Performance Level
First-Year Retention Rate	85	84	0.2	59	At
4-year Graduation Rate	26	41	-1.4	7	Well Below
6-year Graduation Rate	62	64	-0.2	42	At

We use multiple regression models to determine your institution's expected performance. These models are based on those used by the Education Trust for the College Results Online interactive Web tool. Differences in retention and graduation rates ("outcome" variables) are considered in light of differences in several "explanatory" variables, such as: public versus private governance, basic Carnegie Classification, minority-serving status, admissions selectivity, size of undergraduate student body, proportion of undergraduates receiving Pell grants, student related expenditures per student, proportion of undergraduate students over 25 years old, proportion of undergraduates enrolled part-time, status as a commuter campus, and proportion of undergraduates from underrepresented minority groups. The remainder of this appendix describes the data that were used for this purpose and the modeling procedures that were employed.

Data: The Education Trust provided most of the data that were used for model building. The dataset included institutional variables from approximately 1,400 4-year institutions that submitted data to IPEDS for the 2006–2007 academic year. Additional variables were derived from other sources (e.g., Barron's Guide to American Colleges) or constructed using specified-calculation rules.

Modeling Procedures: Three Ordinary Least Squares (OLS) regression models were estimated on all available schools in the dataset using the first-year retention rate, 4-year graduation rate, and 6-year graduation rate as the dependent variables. Specifically, these outcomes are defined as follows:

- First-year retention rate: percentage of first-time, full-time degree-seeking undergraduates in the fall of 2005 who were enrolled at the same institution in the fall of 2006.

- Four-year graduation rate: percentage of students who began in 2000 as first-time, full-time degree-seeking students at the institution and graduated within four years.

- Six-year graduation rate: percentage of students who began in 2000 as first-time, full-time degree-seeking students at the institution and graduated within six years.

Potential predictors of these outcome variables were selected based on a review of literature and the previous work of the Education Trust. The following is the final list of the predictors that were used:

- Sector (public vs. private)

- Status as an Historically Black College or University (HBCU)

- Carnegie Classification (coded as 0/1 variables based on the revised basic classification for each school)

- Estimated median SAT or ACT equivalent of freshman class

- Admissions selectivity, per Barron's Guide to American Colleges

- Number of full-time equivalent (FTE) undergraduates (in 1000s)

- Percentage of undergraduates receiving Pell grants

- Student-related expenditures / FTE student

- Percentage of FTE undergraduate students age 25 and over

- Percentage of undergraduates who are enrolled part-time

- Status as a commuter campus

Please refer to www.collegeresults.org/aboutthedata.aspx for more detail on these variables. All the models used the same set of predictors. However, because of missing data, not all schools were used in each model. Schools missing any predictor or outcome data were designated "N/A." Table 8 on the next page shows the number of schools used for model building, the resulting R-square value (R-square indicates the percentage of variance in the outcome variable that can be explained by the combination of predictors used), and the coefficients and significance of each intercept and predictor variable (* indicates p values less than .05 and ** indicates p values less than .01).

Table 8: Regression Results for Graduation and Retention Rate Outcomes

	First-year Retention Rate	4-year Graduation Rate	6-year Graduation Rate
Number of Schools	1298	1258	1292
R-square	0.69	0.74	0.74
Intercept	28.437**	-26.780**	-11.497**
Sector (public vs. private)	-1.582**	-12.312**	-6.549**
Status as an Historically Black College or University (HBCU)	5.827**	2.112	3.149*
Carnegie Classification [1]			
RU/VH: Research Universities (very high research activity)	-0.985	0.758	0.716
RU/H: Research Universities (high research activity)	-1.827	-3.629*	-1.315
DRU: Doctoral/Research Universities	0.303	-0.207	0.548
Master's L: Master's Colleges and Universities (larger programs)	1.984**	-0.254	0.757
Master's S: Master's Colleges and Universities (smaller programs)	0.163	0.342	-0.756
Bac/A&S: Baccalaureate Colleges--Arts & Sciences	-0.959	1.745	-1.214
Bac/Diverse: Baccalaureate Colleges--Diverse Fields	-2.677**	-2.758*	-2.787**
Bac/Assoc: Baccalaureate/Associate's Colleges	-0.034	3.155	-0.398
Other	-2.728*	-6.873**	-5.035**
Estimated median SAT or ACT equivalent of freshman class	0.043**	0.066**	0.065**
Admissions selectivity, per Barron's Guide to American Colleges	0.830**	1.701**	1.436**
Number of full-time equivalent (FTE) undergraduates (1000s)	0.348**	-0.139	0.297**
Percentage of undergraduates receiving Pell grants	-0.078**	-0.158**	-0.114**
Student-related expenditures / FTE student	0.073*	0.196**	0.072
Percentage of FTE undergraduate students age 25 and over	-0.086**	-0.117**	-0.162**
Percentage of undergraduates who are enrolled part time	-0.012	-0.078*	-0.055
Status as a commuter campus	-1.010*	-4.915**	-4.349**

* p<.05 ** p<.01 [1] "Masters M" was the reference classification

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.

Some schools may be interested in predicting mean CLA scores for other mean SAT scores. Table 10 below provides the necessary parameters from the regression equations that will allow you to carry out your own calculations. Also provided for each equation is the standard error and R-square values. Table 11 on the next two pages is a lookup table for expected mean CLA scores for any given mean SAT score for freshmen and seniors.

Table 10: Equations Used to Estimate CLA Scores on the Basis of Mean SAT Scores

Fall 2007 Freshmen	Intercept	Slope	Standard Error	R-square
Performance Task	278	0.74	40.4	0.83
Analytic Writing Task	427	0.61	36.0	0.81
Make-an-Argument	416	0.63	42.1	0.77
Critique-an-Argument	422	0.62	39.0	0.79
Total Score	350	0.68	35.4	0.85

Spring 2008 Seniors	Intercept	Slope	Standard Error	R-square
Performance Task	396	0.71	46.6	0.76
Analytic Writing Task	535	0.60	37.0	0.78
Make-an-Argument	521	0.60	43.2	0.73
Critique-an-Argument	543	0.59	39.4	0.76
Total Score	472	0.65	37.6	0.80

Table 11: Expected CLA Score for Any Given Mean SAT Score for Freshmen and Seniors

Mean SAT Score	Freshmen					Seniors				
	Performance Task	Analytic Writing Task	Make-an-Argument	Critique-an-Argument	Total Score	Performance Task	Analytic Writing Task	Make-an-Argument	Critique-an-Argument	Total Score
1600	1452	1435	1428	1448	1448	1583	1497	1472	1525	1551
1590	1445	1428	1422	1441	1441	1575	1492	1466	1519	1544
1580	1438	1422	1415	1435	1435	1567	1486	1461	1513	1536
1570	1431	1415	1409	1428	1428	1559	1480	1455	1507	1529
1560	1424	1409	1403	1421	1421	1551	1474	1449	1501	1522
1550	1417	1403	1397	1414	1414	1543	1469	1444	1495	1515
1540	1409	1396	1390	1408	1407	1535	1463	1438	1489	1507
1530	1402	1390	1384	1401	1400	1527	1457	1432	1483	1500
1520	1395	1383	1378	1394	1393	1519	1451	1427	1477	1493
1510	1388	1377	1371	1387	1386	1511	1446	1421	1471	1486
1500	1381	1370	1365	1381	1379	1503	1440	1415	1465	1479
1490	1374	1364	1359	1374	1373	1495	1434	1409	1459	1471
1480	1367	1358	1353	1367	1366	1487	1428	1404	1453	1464
1470	1359	1351	1346	1360	1359	1479	1423	1398	1447	1457
1460	1352	1345	1340	1354	1352	1471	1417	1392	1441	1450
1450	1345	1338	1334	1347	1345	1463	1411	1387	1435	1443
1440	1338	1332	1327	1340	1338	1455	1405	1381	1429	1435
1430	1331	1325	1321	1333	1331	1447	1400	1375	1423	1428
1420	1324	1319	1315	1327	1324	1439	1394	1370	1417	1421
1410	1317	1313	1309	1320	1317	1431	1388	1364	1411	1414
1400	1309	1306	1302	1313	1311	1423	1382	1358	1405	1407
1390	1302	1300	1296	1306	1304	1415	1377	1353	1399	1399
1380	1295	1293	1290	1300	1297	1407	1371	1347	1393	1392
1370	1288	1287	1284	1293	1290	1399	1365	1341	1387	1385
1360	1281	1281	1277	1286	1283	1391	1359	1336	1381	1378
1350	1274	1274	1271	1279	1276	1383	1354	1330	1375	1371
1340	1267	1268	1265	1273	1269	1375	1348	1324	1369	1363
1330	1259	1261	1258	1266	1262	1367	1342	1318	1363	1356
1320	1252	1255	1252	1259	1255	1359	1336	1313	1357	1349
1310	1245	1248	1246	1252	1249	1351	1331	1307	1351	1342
1300	1238	1242	1240	1246	1242	1343	1325	1301	1345	1334
1290	1231	1236	1233	1239	1235	1335	1319	1296	1339	1327
1280	1224	1229	1227	1232	1228	1327	1313	1290	1333	1320
1270	1217	1223	1221	1225	1221	1319	1308	1284	1327	1313
1260	1209	1216	1214	1219	1214	1311	1302	1279	1321	1306
1250	1202	1210	1208	1212	1207	1303	1296	1273	1315	1298
1240	1195	1203	1202	1205	1200	1295	1290	1267	1309	1291
1230	1188	1197	1196	1198	1193	1287	1285	1262	1303	1284
1220	1181	1191	1189	1192	1186	1279	1279	1256	1297	1277
1210	1174	1184	1183	1185	1180	1271	1273	1250	1291	1270
1200	1167	1178	1177	1178	1173	1263	1267	1244	1285	1262
1190	1159	1171	1170	1171	1166	1255	1262	1239	1279	1255
1180	1152	1165	1164	1165	1159	1247	1256	1233	1273	1248
1170	1145	1159	1158	1158	1152	1239	1250	1227	1268	1241
1160	1138	1152	1152	1151	1145	1231	1244	1222	1262	1234
1150	1131	1146	1145	1144	1138	1223	1239	1216	1256	1226
1140	1124	1139	1139	1138	1131	1215	1233	1210	1250	1219
1130	1117	1133	1133	1131	1124	1207	1227	1205	1244	1212
1120	1110	1126	1127	1124	1118	1199	1221	1199	1238	1205
1110	1102	1120	1120	1117	1111	1191	1216	1193	1232	1197
1100	1095	1114	1114	1111	1104	1183	1210	1188	1226	1190
1090	1088	1107	1108	1104	1097	1175	1204	1182	1220	1183
1080	1081	1101	1101	1097	1090	1167	1198	1176	1214	1176
1070	1074	1094	1095	1090	1083	1159	1193	1171	1208	1169
1060	1067	1088	1089	1084	1076	1151	1187	1165	1202	1161
1050	1060	1082	1083	1077	1069	1143	1181	1159	1196	1154
1040	1052	1075	1076	1070	1062	1135	1175	1153	1190	1147
1030	1045	1069	1070	1063	1056	1127	1170	1148	1184	1140
1020	1038	1062	1064	1057	1049	1119	1164	1142	1178	1133
1010	1031	1056	1057	1050	1042	1111	1158	1136	1172	1125
1000	1024	1049	1051	1043	1035	1103	1152	1131	1166	1118
990	1017	1043	1045	1036	1028	1095	1147	1125	1160	1111

Table 11 (continued): Expected CLA Score for Any Given Mean SAT Score for Freshmen and Seniors

Mean SAT Score	Freshmen					Seniors					Mean SAT Score	Freshmen					Seniors				
	Performance Task	Analytic Writing Task	Make-an-Argument	Critique-an-Argument	Total Score	Performance Task	Analytic Writing Task	Make-an-Argument	Critique-an-Argument	Total Score		Performance Task	Analytic Writing Task	Make-an-Argument	Critique-an-Argument	Total Score	Performance Task	Analytic Writing Task	Make-an-Argument	Critique-an-Argument	Total Score
980	1010	1037	1039	1030	1021	1087	1141	1119	1154	1104	680	795	844	850	827	814	847	968	949	974	887
970	1002	1030	1032	1023	1014	1079	1135	1114	1148	1097	670	788	838	844	820	808	839	963	943	968	880
960	995	1024	1026	1016	1007	1071	1129	1108	1142	1089	660	781	831	838	814	801	831	957	937	962	873
950	988	1017	1020	1009	1000	1063	1124	1102	1136	1082	650	774	825	831	807	794	823	951	932	956	866
940	981	1011	1013	1003	994	1055	1118	1097	1130	1075	640	767	818	825	800	787	815	945	926	950	859
930	974	1004	1007	996	987	1047	1112	1091	1124	1068	630	760	812	819	793	780	807	940	920	944	851
920	967	998	1001	989	980	1039	1106	1085	1118	1060	620	753	805	813	787	773	799	934	914	938	844
910	960	992	995	982	973	1031	1101	1079	1112	1053	610	745	799	806	780	766	791	928	909	932	837
900	952	985	988	976	966	1023	1095	1074	1106	1046	600	738	793	800	773	759	783	922	903	926	830
890	945	979	982	969	959	1015	1089	1068	1100	1039	590	731	786	794	766	752	775	917	897	920	823
880	938	972	976	962	952	1007	1083	1062	1094	1032	580	724	780	787	760	746	767	911	892	914	815
870	931	966	970	955	945	999	1078	1057	1088	1024	570	717	773	781	753	739	759	905	886	908	808
860	924	960	963	949	938	991	1072	1051	1082	1017	560	710	767	775	746	732	751	899	880	902	801
850	917	953	957	942	932	983	1066	1045	1076	1010	550	703	761	769	739	725	743	894	875	896	794
840	910	947	951	935	925	975	1060	1040	1070	1003	540	695	754	762	733	718	735	888	869	890	786
830	902	940	944	928	918	967	1055	1034	1064	996	530	688	748	756	726	711	727	882	863	884	779
820	895	934	938	922	911	959	1049	1028	1058	988	520	681	741	750	719	704	719	876	858	878	772
810	888	927	932	915	904	951	1043	1023	1052	981	510	674	735	743	712	697	711	871	852	872	765
800	881	921	926	908	897	943	1037	1017	1046	974	500	667	728	737	706	690	703	865	846	866	758
790	874	915	919	901	890	935	1032	1011	1040	967	490	660	722	731	699	684	695	859	840	860	750
780	867	908	913	895	883	927	1026	1005	1034	960	480	653	716	725	692	677	687	853	835	854	743
770	860	902	907	888	876	919	1020	1000	1028	952	470	645	709	718	685	670	679	848	829	848	736
760	852	895	900	881	870	911	1014	994	1022	945	460	638	703	712	679	663	671	842	823	842	729
750	845	889	894	874	863	903	1009	988	1016	938	450	631	696	706	672	656	663	836	818	836	722
740	838	882	888	868	856	895	1003	983	1010	931	440	624	690	699	665	649	655	830	812	830	714
730	831	876	882	861	849	887	997	977	1004	923	430	617	683	693	658	642	647	825	806	824	707
720	824	870	875	854	842	879	991	971	998	916	420	610	677	687	652	635	639	819	801	818	700
710	817	863	869	847	835	871	986	966	992	909	410	603	671	681	645	628	631	813	795	812	693
700	810	857	863	841	828	863	980	960	986	902	400	595	664	674	638	622	623	807	789	806	686
690	802	850	856	834	821	855	974	954	980	895											

Jackson State University (5)
Pace University (5)
University of Charleston (5)

Allegheny College (4)
Arizona State University (4)
Bethel University (4)
Bluefield State College (4)
Charleston Southern University (4)
College of Saint Benedict/St. John's University (4)
Concord University (4)
Marshall University (4)
Missouri Southern State University-Joplin (4)
Missouri Western State University (4)
Shepherd University (4)
Truman State University (4)
University of Texas, Arlington (4)
University of Texas, Austin (4)
University of Texas, Brownsville (4)
University of Texas, Dallas (4)
University of Texas, El Paso (4)
University of Texas, Pan American (4)
University of Texas, Permian Basin (4)
University of Texas, San Antonio (4)
University of Texas, Tyler (4)
West Liberty State College (4)
Westminster College, MO (4)
Westminster College, UT (4)
William Woods University (4)
Wofford College (4)

Alaska Pacific University (3)
Arkansas State University (3)
Auburn University (3)
Aurora University (3)
Averett University (3)
Barton College (3)
Cabrini College (3)
Duke University (3)
California State University, Northridge (3)
Centenary College (3)
Dominican University of California (3)
Franklin Pierce University (3)
Furman University (3)
Glenville State College (3)
Hannibal LaGrange College (3)

Indiana Wesleyan University (3)
Lynchburg College (3)
Marian College (3)
Morehead State University (3)
Pacific University (3)
Seton Hill University (3)
Spelman College (3)
Stonehill College (3)
Texas Lutheran University (3)
University of Evansville (3)
University of Great Falls (3)
University of Montana, Missoula (3)
Ursinus College (3)
Ursuline College (3)
Wagner College (3)
Wartburg College (3)
Wesley College (3)
West Virginia University (3)

Austin College (2)
Beloit College (2)
Califionia State University, Los Angeles (2)
California State University, Monterey Bay (2)
California State University, San Marcos (2)
California State University, Stansilus (2)
Clemson University (2)
Delaware State University (2)
Fairmont State University (2)
Florida State University (2)
Fort Hays State University (2)
Heritage University (2)
Houghton College (2)
Juniata College (2)
Loyola University of New Orleans (2)
Marywood University (2)
Monmouth University (2)
Mount Saint Mary College (2)
Oklahoma State University (2)
Randolph-Macon College (2)
Rhodes College (2)
Richard Stockton College of New Jersey (2)
San Jose State University (2)
Slippery Rock University (2)
Sonoma State University (2)
Southwestern University (2)
The College of St. Scholastica (2)
Toccoa Falls College (2)

Number of Years Participating in Parentheses

University of Arkansas, Fort Smith (2)
University of Kentucky (2)
University of North Carolina, Pembroke (2)
University of North Texas (2)
University of Pittsburgh (2)
University of the Virgin Islands (2)
Upper Iowa University (2)
Washington and Lee University (2)
Weber State University (2)
West Virginia University Institute of Technology (2)
Wichita State University (2)

Albertson College of Idaho (1)
Appalachian State University (1)
Auburn University Montgomery (1)
Bloomfield College (1)
Bob Jones University (1)
California Baptist University (1)
California Maritime Academy (1)
California State University, Bakersfield (1)
California State University, Channel Islands (1)
California State University, Chico (1)
California State University, Dominguez Hills (1)
California State University, East Bay (1)
California State University, Fresno (1)
California State University, Fullerton (1)
California State University, Long Beach (1)
California State University, Sacramento (1)
California State University, San Bernardino (1)
California State University, San Luis Obispo (1)
Capital University (1)
Central Connecticut State University (1)
Colorado State University (1)
East Carolina University (1)
Eckerd College (1)
Elizabeth City State University (1)
Emory & Henry College (1)
Endicott College (1)
Hiram College (1)
Humboldt State University (1)
Illinois College (1)
Indiana University of Pennsylvania (1)
Lewis & Clark College (1)
Metropolitan State University (1)
Millersville University of Pennsylvania (1)
Minot State University (1)
Misericordia University (1)

Nicholls State University (1)
Norfolk State University (1)
North Carolina State University (1)
North Dakota State University (1)
North Park University (1)
Our Lady of the Lake University (1)
Peace College (1)
Pepperdine University (1)
Presybeterian College (1)
Rhode Island College (1)
Rice University (1)
Rollins College (1)
Saint Louis University in Madrid (1)
San Diego State University (1)
San Francisco State University (1)
Southern University and A&M College (1)
Southern Virginia University (1)
St. Cloud State University (1)
Tarleton State University (1)
Texas A&M International University (1)
Texas Tech University (1)
The College of New Jersey (1)
The College of New Rochelle (1)
Towson University (1)
University of Alabama (1)
University of Central Florida (1)
University of Findlay (1)
University of Louisiana (1)
University of Michigan (1)
University of Missouri, St. Louis (1)
University of Nebraska Omaha (1)
University of North Carolina, Asheville (1)
University of North Carolina, Chapel Hill (1)
University of North Carolina, Greensboro (1)
University of North Carolina, Wilmington (1)
University of Saint Thomas in Minnesota (1)
University of Southern Alabama (1)
University of Virginia's College at Wise (1)
University of Wisconsin Lacrosse (1)
Walsh College (1)
Warner Southern College (1)
Washburn University (1)
Washington and Jefferson College (1)
West Virginia State University (1)
Western Carolina University (1)

Number of Years Participating in Parentheses

J   CLA Student Data File

In tandem with this report, we provide a CLA Student Data File, which includes over 60 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

- 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).

- 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

- Cumulative Undergraduate GPA

- Transfer Student Status

- Program ID and Name (for classification of students into different colleges, schools, fields of study, majors, programs, etc.)

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

- SAT I - Math

- SAT I - Verbal / Critical Reading

- SAT Total (Math + Verbal)

- SAT I - Writing

- SAT I - Writing (Essay subscore)

- SAT I - Writing (Multiple-choice subscore)

- ACT - Composite

- ACT - English

- ACT - Reading

- ACT - Mathematics

- ACT - Science

- ACT - Writing

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

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