CLA

University of Georgia

2008–2009 CLA INSTITUTIONAL REPORT

Contents and Navigation

This Institutional Report presents Collegiate Learning Assessment (CLA) results for colleges and universities that assessed their students in fall 2008 and/or spring 2009.

Orange text signals sections specific to your institution.

Report

The Report introduces readers to the CLA and its methodology, presents your results and offers guidance on interpretation and next steps.

Appendices

Appendices offer more detail on CLA tasks, scoring and scaling, the overall institutional sample and results, regression equations, and the Student Data File.

Attachments

Your Student Data File may be used to link with other data sources, and generate hypotheses for additional research.

Introduction to the CLA

The Collegiate Learning Assessment (CLA) offers an authentic approach to assessment and improvement of teaching and learning in higher education. Over 400 institutions and 180,000 students have participated to date. Growing commitment on the part of higher education to assess student learning makes this a good time to review the distinguishing features of the CLA and how it connects to improving teaching and learning on your campus.

The CLA is intended primarily to assist faculty, department chairs, school administrators and others interested in programmatic change to improve teaching and learning, particularly with respect to strengthening higher order skills.

The CLA helps campuses follow a continuous improvement model that positions faculty as central actors.

CLA Education (described on page 8) does just that by focusing on curriculum and pedagogy and the link between assessment and teaching and learning.

The continuous improvement model also requires multiple assessment indicators beyond the CLA because no single test to benchmark student learning in higher education is feasible or desirable.

This, however, does not mean certain skills judged to be important by most faculty and administrators across virtually all institutions cannot be measured; indeed, the higher order skills the CLA focuses on fall into this measurable category.

The CLA presents realistic problems that require students to analyze complex materials. Several different types of materials are used that vary in relevance to the task, credibility, and other characteristics. Students' written responses to the task are graded to assess their abilities to think critically, reason analytically, solve problems, and communicate clearly and cogently.

The institution—not the student—is the initial primary unit of analysis. The CLA is designed to measure an institution's contribution, or value added, to the development of these competencies, including the effects of changes to curriculum and pedagogy.

The CLA uses detailed scoring guides to precisely and reliably evaluate student responses. It also encourages institutions to compare their student learning results on the CLA with learning at other institutions and on other assessments.

The signaling quality of the CLA is important because institutions need to benchmark (have a frame of reference for) where they stand and how much progress their students have made relative to the progress of students at other colleges. Otherwise, how do they know how well they are doing?

Yet, the CLA is not about ranking institutions. Rather, it is about highlighting differences between them that can lead to improvements in teaching and learning.

While the CLA is indeed an assessment instrument, it is deliberately designed to contribute directly to the improvement of teaching and learning. In this respect it is in a league of its own.

Methods

The CLA provides an authentic, stable platform for samples of your students to demonstrate performance in key higher order skills:

- Critical thinking
- Analytic reasoning
- Problem solving
- Written communication

We calculate both unadjusted and adjusted scores to give two important perspectives on institutional performance and comparisons.

Unadjusted scores report absolute performance and enable absolute comparisons across schools.

Although absolute measures, such as graduation or retention rates, are traditionally relied upon in post-secondary outcomes and comparisons, there is a strong case to adjust scores to control for entering academic ability.

Adjusted scores level the playing field for schools with different admissions standards or imperfectly representative samples.

To adjust scores, we compute an expected CLA score for your student sample.

Expected scores are based on two factors: (a) the academic ability of your students prior to matriculation and (b) the estimated linear relationship between CLA scores and entering academic ability of student samples at all schools.

Differences between observed and expected scores are reported in standard error units for uniform comparisons across CLA tasks. We label them Deviation Scores and present them in Table 1 on page 4.

For this report, Mean CLA Scores quantify unadjusted performance and permit absolute comparisons while Deviation Scores quantify adjusted performance and enable controlled comparisons.

The next page summarizes both unadjusted and adjusted results for your student samples. It shows Mean CLA Scores, Percentile Ranks (two sets) and Performance Levels.

Unadjusted Percentile Ranks (on the left of the next page) are based on the range of Mean CLA Scores observed across all schools.

Adjusted Percentile Ranks (on the right) are based on the range of Deviation Scores and are used to assign Performance Levels defined on page 4.

We compare the Deviation Scores of your fall 2008 and spring 2009 student samples to estimate value added. We label these estimates Difference Scores.

Moving forward, we will continue to provide both unadjusted and adjusted scores. More importantly, we will employ methodological enhancements to maximize the precision of our value-added estimates, allow schools to select multiple peer comparison groups, and elevate the diagnostic value of CLA results for the improvement of teaching and learning.

Your Results

University of Georgia

No — adjusted for entering academic ability? — Yes

Unadjusted

94
Unadjusted percentile rank

Mean CLA Score	Unadjusted Percentile Rank
1258	94
1196	91
1319	97
1326	97
1311	97

Before adjusting for entering academic ability, your first-year students performed higher than 94 percent of comparison institutions

First-year Students

Adjusted

88
Adjusted percentile rank

	Adjusted Percentile Rank	Performance Level
Total CLA Score	88	Above
Performance Task	70	Above
Analytic Writing Task	92	Well Above
Make-an-Argument	87	Above
Critique-an-Argument	95	Well Above

After adjusting for entering academic ability, your first-year students performed higher than 88 percent of comparison institutions

98
Unadjusted percentile rank

Mean CLA Score	Unadjusted Percentile Rank
1358	98
1331	98
1384	95
1368	95
1399	94

Before adjusting for entering academic ability, your seniors performed higher than 98 percent of comparison institutions

Seniors

64
Adjusted percentile rank

	Adjusted Percentile Rank	Performance Level
Total CLA Score	64	At
Performance Task	76	Above
Analytic Writing Task	54	At
Make-an-Argument	53	At
Critique-an-Argument	53	At

After adjusting for entering academic ability, your seniors performed higher than 64 percent of comparison institutions

Value Added

21
Adjusted percentile rank

	Adjusted Percentile Rank	Performance Level
Total CLA Score	21	Below
Performance Task	63	At
Analytic Writing Task	8	Well Below
Make-an-Argument	11	Below
Critique-an-Argument	7	Well Below

Comparison institutions are four-year colleges and universities where at least 25 students had both a CLA and EAA score in fall 2008 and/or spring 2009

After adjusting for entering academic ability, the difference in performance between your seniors and first-year students was higher than 21 percent of comparison institutions

Your Results

1

First-Year Students	Performance Level	Adjusted Percentile Rank	Deviation Score	Unadjusted Percentile Rank	Observed Mean CLA Score	Expected Mean CLA Score	Mean EAA Score	Student Count
Total CLA Score	Above	88	1.1	94	1258	1210	1224	106
Performance Task	Above	70	0.5	91	1196	1176	1216	53
Analytic Writing Task	Well Above	92	1.4	97	1319	1242	1231	53
Make-an-Argument	Above	87	1.2	97	1326	1250	1231	53
Critique-an-Argument	Well Above	95	1.6	97	1311	1234	1231	53

Seniors	Performance Level	Adjusted Percentile Rank	Deviation Score	Unadjusted Percentile Rank	Observed Mean CLA Score	Expected Mean CLA Score	Mean EAA Score	Student Count
Total CLA Score	At	64	0.4	98	1358	1337	1291	107
Performance Task	Above	76	0.7	98	1331	1301	1290	54
Analytic Writing Task	At	54	0.1	95	1384	1377	1292	53
Make-an-Argument	At	53	0.2	95	1368	1359	1292	53
Critique-an-Argument	At	53	0.1	94	1399	1395	1292	53

Value-Added Estimates	Performance Level	Adjusted Percentile Rank	Difference Score
Total CLA Score	Below	21	-0.7
Performance Task	At	63	0.2
Analytic Writing Task	Well Below	8	-1.3
Make-an-Argument	Below	11	-1.0
Critique-an-Argument	Well Below	7	-1.5

Moving from right to left, Table 1 above shows how many students completed the CLA and their mean Entering Academic Ability (EAA) scores,* as well as their expected and observed mean CLA scores.**

Unadjusted percentile ranks show how your school's mean CLA scores compare to those at other schools BEFORE adjusting for ability.

Adjusted percentile ranks are based on deviation scores and are used to assign performance levels.***

Deviation scores control for ability and quantify the difference between observed and expected mean CLA scores in standard error units.

Difference scores represent estimates of value added. They are calculated by subtracting first-year deviation scores from senior deviation scores.

* SAT Math + Verbal, ACT Composite or Scholastic Level Exam (SLE) scores on the SAT scale. Hereinafter referred to as Entering Academic Ability (EAA).

** An "N/A" indicates that there were not enough students with both CLA and EAA scores to compute a result.

***

90-99th	Well Above Expected
70-89th	Above Expected
30-69th	At Expected
10-29th	Below Expected
0-9th	Well Below Expected

Your Results

2

First-Year Students	Student Count	25th Percentile	Mean	75th Percentile	Standard Deviation
Performance Task	53	1105	1196	1299	151
Analytic Writing Task	53	1262	1319	1374	97
Make-an-Argument	53	1228	1326	1441	141
Critique-an-Argument	53	1215	1311	1396	124

Seniors	Student Count	25th Percentile	Mean	75th Percentile	Standard Deviation
Performance Task	54	1248	1331	1465	150
Analytic Writing Task	53	1319	1384	1473	117
Make-an-Argument	53	1295	1368	1465	129
Critique-an-Argument	53	1304	1399	1489	170

The counts, means, percentiles, and standard deviations in Table 2 represent students with and without EAA scores.

As such, these data may differ from those in Table 1.

Your Results

3 Relationship Between CLA Performance and Entering Academic Ability (EAA)

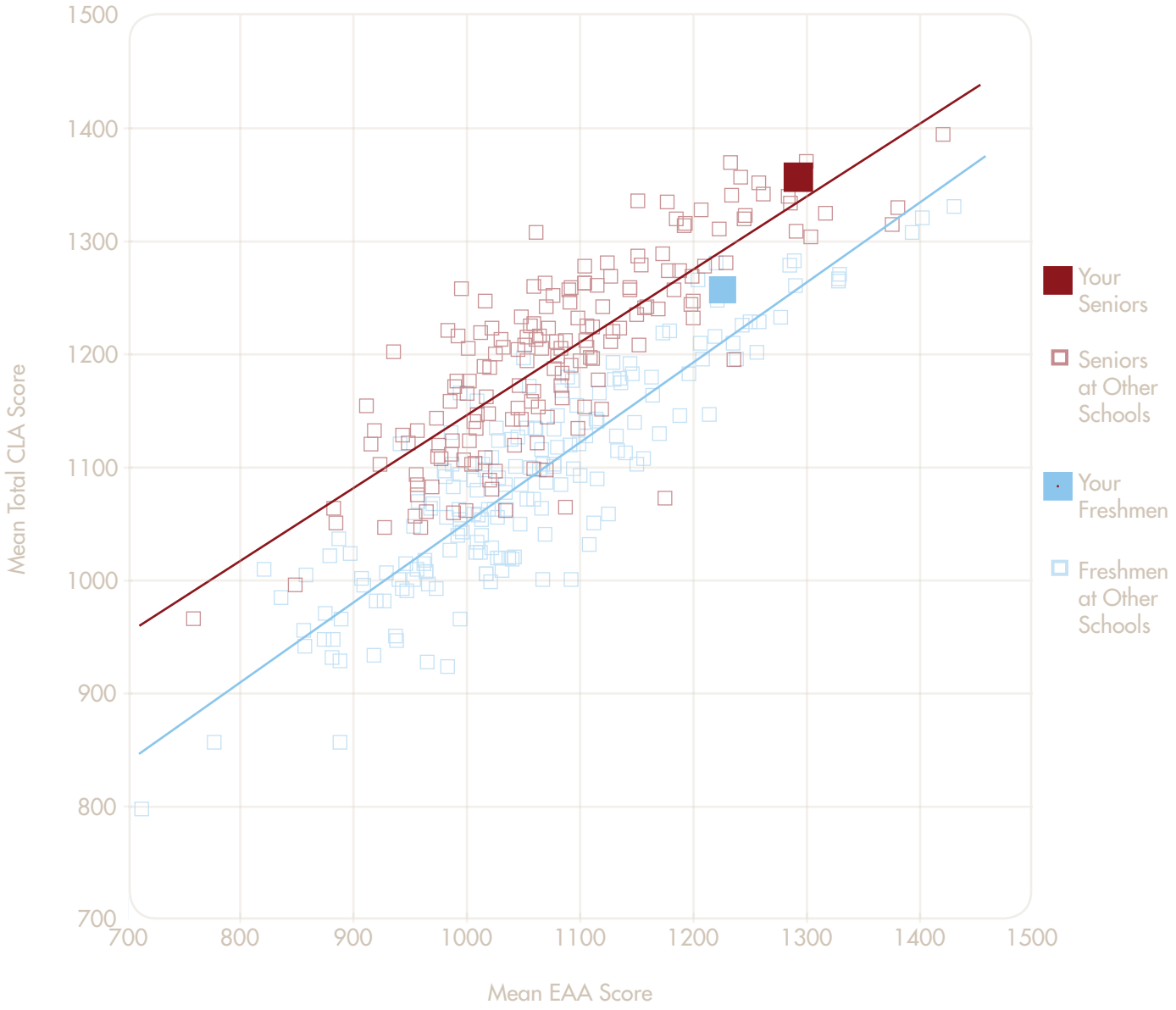

Figure 3 above shows data for schools where at least 25 students had both a CLA and EAA score in fall 2008 and/or spring 2009.

The solid blue square (freshmen) and solid red square (seniors) represent the samples of students you tested.

Outlined blue and red and squares represent other schools.

The diagonal lines (blue for freshmen and, above that, red for seniors) show the estimated linear relationship between an institution's mean EAA score and its mean CLA score for its students.

Schools above the relevant lines scored higher than expected, whereas those below the lines did not.

Appendix 8 summarizes the equations used to estimate expected mean CLA scores on the basis of mean EAA scores across schools.

Diagnostic Guidance

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 EAA scores) at analyzing complex, realistic scenarios; writing a persuasive, analytic essay to support a position on an issue; and/or critiquing written arguments.

Performance Task

Analyzing complex, realistic scenarios

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.

Make-an-Argument

Writing a persuasive, analytic essay

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.

Critique-an-Argument

Critiquing written arguments

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.

Moving Forward

We encourage institutions to examine performance across CLA tasks and communicate results across campus, link student-level CLA results with other data sources, pursue in-depth sampling, stay informed through the CLA Spotlight, and participate in CLA Education offerings.

Student-level CLA results are provided for you to link with other data sources (e.g., course-taking patterns, grades, portfolios, student satisfaction and engagement, major-specific tests, etc.).

These internal analyses can help you generate hypotheses for additional research, which you can pursue through CLA in-depth sampling in experimental areas (e.g., programs or colleges within your campus) in subsequent years or simultaneously.

We welcome and encourage your participation in the CLA Spotlight—a series of free informational web conferences. Each CLA Spotlight features campuses doing promising work using the CLA, guest-speakers from the larger world of assessment, and/or CLA staff members who provide updates or insights to CLA-related programs and projects.

CLA Education focuses on curriculum and pedagogy, and embraces the crucial role that faculty play in the process of assessment.

The flagship program of CLA Education is the Performance Task Academy, which shifts the focus from general assessment to the course-level work of faculty. The Performance Task Academy provides an opportunity for faculty members to learn to diagnose their individual students' work and to receive guidance in creating their own performance tasks, which are designed to supplement the educational reform movement toward a case and problem approach in learning and teaching.

A CLA Education web site also has been formed as a clearing house for performance tasks developed by faculty. For more information, visit www.claintheclassroom.org, or contact Director of CLA Education, Dr. Marc Chun at mchun@cae.org.

Through the steps noted above we encourage institutions to move toward a continuous system of improvement in teaching and learning stimulated by the CLA. Without your contributions, the CLA would not be on the exciting path that it is today. We look forward to your continued involvement!

1 Task Overview

Introduction

The CLA is comprised of three types of prompts within two types of task: the Performance Task and the Analytic Writing Task. Most students take one task or the other. The Analytic Writing Task includes a pair of prompts called Make-an-Argument and Critique-an-Argument.

The CLA uses direct measures of skills in which students perform cognitively demanding tasks from which quality of response is scored. All CLA measures are administered online and contain open-ended prompts that require constructed responses. There are no multiple-choice questions.

The CLA tasks require that students integrate critical thinking, analytic reasoning, problem solving, and written communication skills. The holistic integration of these skills on the CLA tasks mirrors the requirements of serious thinking and writing tasks faced in life outside of the classroom.

1 Task Overview

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. Upon completing a question, students then select the next question in the queue.

No two Performance Tasks assess the exact same combination of skills. 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.

1 Task Overview

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 skill in articulating complex ideas, examining claims and evidence, supporting ideas with relevant reasons and examples, sustaining a coherent discussion, and using standard written English.

Make-an-Argument

A "Make-an-Argument" prompt typically presents an opinion on some issue and asks students to write, in 45 minutes, a persuasive, analytic essay to support a position on the issue. Key elements include: 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.

Critique-an-Argument

A "Critique-an-Argument" prompt asks students, in 30 minutes, to critique an argument by discussing how well reasoned they find it to be (rather than simply agreeing or disagreeing with the position presented). Key elements of the essay include: 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 a critique in a written response that is a grammatically correct, organized, well-developed, logically sound, and neutral in tone.

1 Task Overview

Example Performance Task

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:

Example Document Library

- Newspaper article about the accident
- Federal Accident Report on in-flight breakups in single-engine planes
- Internal Correspondence (Pat's e-mail to you and Sally's e-mail to Pat)
- Charts relating to SwiftAir's performance characteristics
- Excerpt from magazine article comparing SwiftAir 235 to similar planes
- Pictures and descriptions of SwiftAir Models 180 and 235

Example 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?

Example Make-an-Argument

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.

Example Critique-an-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.

2 Task Development

Iterative Development Process

A team of researchers and writers generate ideas for Make-an-Argument and Critique-an-Argument prompts, and Performance Task storylines, and then contribute to the development and revision of the prompts and Performance Task documents.

For Analytic Writing Tasks, multiple prompts are generated, revised and pre-piloted, and those prompts that elicit good critical thinking and writing responses during pre-piloting are further revised and submitted to more extensive piloting.

During the development of Performance Tasks, care is taken to ensure that sufficient information is provided to permit multiple reasonable solutions to the issues present in the Performance Task. Documents are crafted such that information is presented in multiple formats (e.g., tables, figures, news articles, editorials, letters, etc.).

While developing a Performance Task, a list of the intended content from each document is established and revised. This list is used to ensure that each piece of information is clearly reflected in the document and/or across documents, and to ensure that no additional pieces of information are embedded in the document that were not intended. This list serves as a draft starting point for the analytic scoring items used in the Performance Task scoring rubrics.

During revision, information is either added to documents or removed from documents to ensure that students could arrive at approximately three or four different conclusions based on a variety of evidence to back up each conclusion. Typically, some conclusions are designed to be supported better than others.

Questions for the Performance Task are also drafted and revised during the development of the documents. The questions are designed such that the initial questions prompt the student to read and attend to multiple sources of information in the documents, and later questions require the student to evaluate the documents and then use their analysis to draw conclusions and justify those conclusions.

After several rounds of revision, the most promising of the Performance Tasks and the Make-an-Argument and Critique-an-Argument prompts are selected for pre-piloting. Student responses from the pilot test are examined to identify what pieces of information are unintentionally ambiguous, what pieces of information in the documents should be removed, etc. After revision and additional pre-piloting, the best functioning tasks (i.e., those that elicit the intended types and ranges of student responses) are selected for full piloting.

During piloting, students complete both an operational task and one of the new tasks. At this point, draft scoring rubrics are revised and tested in grading the pilot responses, and final revisions are made to the tasks to ensure that the task is eliciting the types of responses intended.

3 Scoring Criteria

Introduction

This section summarizes the types of questions addressed by CLA scoring of all task types. Because each CLA task and their scoring rubrics differ, not every item listed is applicable to every task. The tasks cover different aspects of critical thinking, analytic reasoning, problem solving, and writing and in doing so can, in combination, better assess the entire domain of performance.

Assessing Critical Thinking, Analytic Reasoning and Problem Solving

Applied in combination, critical thinking, analytic reasoning and problem solving skills are required to perform well on CLA tasks. We define these skills as how well students can evaluate and analyze source information, and subsequently to draw conclusions and present an argument based upon that analysis. In scoring, we specifically consider the following items to be important aspects of these skills.

See page 15 for detail.

Assessing Writing

Analytic writing skills invariably depend on clarity of thought. Therefore, analytic writing and critical thinking, analytic reasoning, and problem solving are related skills sets. The CLA measures critical thinking performance by asking students to explain in writing their rationale for various conclusions. In doing so, their performance is dependent on both writing and critical thinking as integrated rather than separate skills. We evaluate writing performance using holistic scores that consider several aspects of writing depending on the task. The following are illustrations of the types of questions we address in scoring writing on the various tasks.

See page 16 for detail.

3 Scoring Criteria

Assessing Critical Thinking, Analytic Reasoning and Problem Solving

Evaluation of evidence

How well does the student assess the quality and relevance of evidence, including:

- Determining what information is or is not pertinent to the task at hand
- Distinguishing between rational claims and emotional ones, fact from opinion
- Recognizing the ways in which the evidence might be limited or compromised
- Spotting deception and holes in the arguments of others
- Considering all sources of evidence

Analysis and synthesis of evidence

How well does the student analyze and synthesize data and information, including:

- Presenting his/her own analysis of the data or information (rather than "as is")
- Committing or failing to recognize logical flaws (e.g., distinguishing correlation from causation)
- Breaking down the evidence into its component parts;
- Drawing connections between discrete sources of data and information
- Attending to contradictory, inadequate or ambiguous information

Drawing conclusions

How well does the student form a conclusion from their analysis, including:

- Constructing cogent arguments rooted in data/information rather than speculation/opinion
- Selecting the strongest set of supporting data
- Prioritizing components of the argument
- Avoiding overstated or understated conclusions
- Identifying holes in the evidence and subsequently suggesting additional information that might resolve the issue

Acknowledging alternative explanations/viewpoints

How well does the student acknowledge additional perspectives and consider other options, including:

- Recognizing that the problem is complex with no clear answer
- Proposing other options and weighing them in the decision
- Considering all stakeholders or affected parties in suggesting a course of action
- Qualifying responses and acknowledging the need for additional information in making an absolute determination

3 Scoring Criteria

Assessing Writing

Interest

How well does the student maintain the reader's interest?

Does the...

- Student use creative and engaging examples or descriptions
- Structure, syntax and organization add to the interest of their writing
- Student use colorful but relevant metaphors, similes, etc.
- Writing engage the reader
- Writing leave the reader thinking

Presentation

How clear and concise is the argument? Does the student...

- Clearly articulate the argument and the context for that argument
- Correctly and precisely use evidence to defend the argument
- Comprehensibly and coherently present evidence

Development

How effective is the structure? Does the student...

- Logically and cohesively organize the argument
- Avoid extraneous elements in the argument's development
- Present evidence in an order that contributes to a persuasive and coherent argument

Persuasiveness

How well does the student defend the argument? Does the student...

- Effectively present evidence in support of the argument
- Draw thoroughly and extensively from the available range of evidence
- Analyze the evidence in addition to simply presenting it
- Consider counterarguments and address weaknesses in his/her own argument

Mechanics

What is the quality of the student's writing?

- Is vocabulary and punctuation used correctly
- Is the student's understanding of grammar strong
- Is the sentence structure basic, or more complex and creative
- Does the student use proper transitions
- Are the paragraphs structured logically and effectively

4 Scoring Process

Score Sheet

There are two types of items that appear on a CLA score sheet: analytic and holistic. Analytic scoring items are particular to each prompt and holistic items refer to general dimensions, such as evaluation of evidence, drawing conclusions, acknowledging alternative explanations and viewpoints, and overall writing. We compute raw scores for each task by adding up all points on all items (i.e., calculating a unit-weighted sum).

Performance Task scoring is tailored to each specific prompt and includes a combination of both holistic and analytic scoring items. Though there are many types of analytic items on the Performance Task score sheets, the most common represent a list of the possible pieces of information a student could or should raise in their response. These cover the information presented in the Performance Task documents as well as information that can be deduced from comparing information across documents. The analytic items are generally given a score of 0 if the student did not use the information in their response, or 1 if they did. The number of analytic items varies by prompt.

Performance Task holistic items are scored on four or seven-point scales (i.e., 1-4 or 1-7). There are multiple holistic items per Performance Task that require graders to provide an evaluation of different aspects of critical thinking and reasoning in the student responses. These holistic items include areas such as the student's use of the most relevant information in the Performance Task, their recognition of strengths and weaknesses of various pieces of information, overall critical thinking, and overall writing.

Critique-an-Argument score sheets also include a combination of analytic and holistic scores. Critique-an-Argument analytic items are a list of possible critiques of the argument presented in the prompt. In addition, a few holistic items are used to rate the overall quality, critical thinking and writing over the entire response.

Make-an-Argument score sheets contain only holistic items scored on four or seven-point scales (i.e., 1-4 or 1-7). The holistic items include ratings for various aspects of writing (e.g., organization, mechanics, etc.) and critical thinking (e.g., reasoning and logic, sophistication and depth of treatment of the issues raised in the prompt) as well as two overall assessments of writing and critical thinking.

For all task types, blank responses or responses that are entirely unrelated to the task (e.g., writing about what they had for breakfast) are assigned a 0 and are flagged for removal from the school-level results.

4 Scoring Process

Scoring Procedure

All scorer candidates undergo rigorous training in order to become certified CLA scorers. Training includes an orientation to the prompt and score sheet, instruction on how to evaluate the scoring items, repeated practice grading a wide range of student responses, and extensive feedback and discussion after scoring each response.

After participating in training, scorers complete a reliability check where they score the same set of student responses. Scorers with low agreement or reliability (determined by comparisons of raw score means, standard deviations and correlations among the scorers) are either further coached or removed from scoring.

In fall 2008 and spring 2009, a combination of machine and human scoring was used for the Analytic Writing Task.

The CLA utilizes Pearson Knowledge Technology's Intelligent Essay Assessor program for evaluating responses to the Make-an-Argument and Critique-an-Argument prompts.

The machine scoring engine was developed and tested using scores from a broad range of responses that were previously scored by humans (often double scored). In some cases the automated scoring engine is unable to score off-topic or abnormally short/long responses. These student responses are scored by humans.

5 Scaling Procedures

To facilitate reporting results across schools, ACT scores were converted (using the ACT-SAT crosswalk to the right) to the scale of measurement used to report SAT scores.

For institutions where a majority of students did not have ACT or SAT scores (e.g., two-year institutions and open admission schools), we make available the Scholastic Level Exam (SLE), a short-form cognitive ability measure, as part of the CLA. 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 entering academic ability (EAA) 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.

Standard ACT to SAT Conversion Table

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.

5 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 approximately 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 average scale score across types.

A linear scale transformation is used to convert reader-assigned raw scores to scale scores. This process results in a scale score distribution with the same mean and standard deviation as the Entering Academic Ability (EAA) scores of the freshmen who took that measure. This type of scaling preserves the shape of the raw score distribution and maintains the relative standing of students. 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 EAA 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 EAA 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 EAA range. Prior to the spring of 2007, scores were capped at 1600. 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 and has done so for new tasks introduced since then. 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.

6 Institutional Sample

In the fall 2008 - spring 2009 testing cycle, 191 institutions tested enough students to provide sufficiently reliable data for the school level analyses and results presented in this report.

Table 4 shows CLA schools grouped by Basic Carnegie Classification. The spread of schools corresponds fairly well with that of the 1,713 four-year institutions across the nation. Table 4 counts exclude some institutions that do not fall into these categories, such as Special Focus Institutions and institutions based outside of the United States.

4

	Nation		CLA	
Carnegie Classification	Number	Percentage	Number	Percentage
Doctorate-granting Universities	282	16%	33	17%
Master's Colleges and Universities	664	39%	88	47%
Baccalaureate Colleges	767	45%	68	36%
	1,713		189	

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

6 Institutional Sample

Table 5 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. Percentage public is one exception.

5

School Characteristic	Nation	CLA
Percentage public	37%	50%
Percentage Historically Black College or University (HBCU)	5%	4%
Mean percentage of undergraduates receiving Pell grants	34%	31%
Mean four-year graduation rate	36%	36%
Mean six-year graduation rate	52%	53%
Mean first-year retention rate	73%	76%
Mean Barron's selectivity rating	3.4	3.3
Mean estimated median SAT score	1067	1060
Mean number of FTE undergraduate students (rounded)	4,320	6,020
Mean student-related expenditures per FTE student (rounded)	$12,365	$11,070

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.

6 Institutional Sample

CLA-participating students appeared to be generally representative of their classmates with respect to entering ability levels as measured by Entering Academic Ability (EAA) scores.

Specifically, across institutions, the average EAA score of CLA freshmen (as verified by the registrar) was only 9 points higher than that of the entire freshman class*: 1059 versus 1050 (n=175). The average EAA score of CLA seniors (as verified by the registrar) was 16 points higher than that of the entire senior class**: 1087 versus 1071 (n=161).

The correlation between the average EAA score of CLA freshmen and their classmates was extremely high (r=.94) (n=175). The correlation between the average EAA score of CLA seniors and their classmates was also high (r=.92) (n=161).

These data suggest that as a group, CLA participants were similar to all students 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 students at that institution.

* As reported by 175 school registrars in response to a fall 2008 request for information.

** As reported by 161 school registrars in response to a spring 2009 request for information.

6 Institutional Sample

The institutions listed here in alphabetical order agreed to be identified as participating schools and may or may not have tested enough students to be included in comparative analyses.

Alaska Pacific University
Allegheny College
Alma College
Arizona State University
Auburn University
Auburn University Montgomery
Augustana College
Aurora University
Averett University
Barton College
Bethel University
Bluefield State College
Cabrini College
California Baptist University
California Maritime Academy
California State Polytechnic University, San Luis Obispo
California State University - San Marcos
California State University, Bakersfield
California State University, Channel Islands
California State University, Chico
California State University, Dominguez Hills
California State University, East Bay
California State University, Fresno
California State University, Fullerton
California State University, Long Beach
California State University, Los Angeles
California State University, Monterey Bay
California State University, Sacramento
California State University, San Bernardino
California State University, Stanislaus
Carlow University
Carthage College
Cedar Crest College
Central College
Central Connecticut State University
Central Washington University
Charleston Southern University
Claremont McKenna College
College of Notre Dame of Maryland
College of Saint Benedict/Saint John's University
College of the Marshall Islands
Colorado State University
Concord University
Delaware State University
Dominican University
Dominican University of California
Douglas College
Drake University
Earlham College
Eastern Connecticut State University
Eckerd College
Emory & Henry College
Emporia State University
Eureka College
Fairmont State University
Fayetteville State University
Flagler College
Florida International University
Florida State University
Fort Hays State University
Franklin Pierce University
Franklin University
Georgetown College
Glenville State College
Gustavus Adolphus College
Hannibal-LaGrange College
Hastings College
Hilbert College
Hope College
Houghton College
Humboldt State University
Illinois College
Illinois Wesleyan University
Indiana University of Pennsylvania
Indiana Wesleyan University
Jackson State University
Jamestown College
Juniata College
Kalamazoo College
LaGrange College
Lane College
Lewis & Clark College
Louisiana Tech University
Loyola University New Orleans
Luther College
Lynchburg College
Macalester College
Marian University
Marshall University
McMurry University
Mercer University
Messiah College
Metropolitan State University
Millersville University of Pennsylvania
Mills College
Minot State University
Misericordia University
Missouri Western State University
Morehead State University
Morningside College
Mount Saint Mary College
Nebraska Wesleyan University
New Mexico Highlands University
Nicholls State University
North Park University
Pacific University
Peabody College at Vanderbilt University
Peace College

6 Institutional Sample

The institutions listed here in alphabetical order agreed to be identified as participating schools and may or may not have tested enough students to be included in comparative analyses.

Pittsburg State University
Plymouth State University
Prairie View A&M University
Presbyterian College
Ramapo College of New Jersey
Randolph-Macon College
Rhode Island College
Rice University
Richard Stockton College of New Jersey
Rockford College
Saginaw Valley State University
San Diego State University
San Francisco State University
San Jose State University
Seton Hill University
Shawnee State University
Shepherd University
Slippery Rock University
Sonoma State University
Southern Oregon University
Southern Virginia University
Southwestern University
Springfield College
St. Cloud State University
Stephens College
Stetson University
Stonehill College
SUNY College at Buffalo
SUNY College at Oneonta
Tarleton State University
Texas Lutheran University
Texas State University San Marcos
Texas Tech University
The College of Idaho
The College of St. Scholastica
The University of Kansas
Trinity Christian College
Truman State University
Tufts University
University of Alabama
University of Charleston
University of Colorado at Colorado Springs
University of Evansville
University of Findlay
University of Georgia
University of Great Falls
University of Missouri - St. Louis
University of New Hampshire
University of Northern Colorado
University of Pittsburgh
University of Southern California
University of Texas - Pan American
University of Texas at Arlington
University of Texas at Austin
University of Texas at Dallas
University of Texas at El Paso
University of Texas at San Antonio
University of Texas at Tyler
University of Texas of the Permian Basin
University of Wisconsin Oshkosh
Upper Iowa University
Ursinus College
Ursuline College
Wagner College
Weber State University
Wesley College
West Liberty University
West Virginia State University
West Virginia University
West Virginia University Institute of Technology
West Virginia Wesleyan College
Western Michigan University
Westminster College (MO)
Westminster College (UT)
Westmont College
Wichita State University
Willamette University
William Woods University
Winston Salem State University
Wittenberg University
Wofford College
Wright State University

7 Institutional Results

Tables 6 and 7 (below) present summary statistics including counts, means, 25th and 75th percentiles, and standard deviations. Units of analysis are students for Table 6 and schools for Table 7. These data represent students with and without Entering Academic Ability (EAA) scores.

6

Fall 2008 Sample (student level)	Student Count	25th Percentile	Mean	75th Percentile	Standard Deviation
Performance Task	13857	934	1068	1191	176
Analytic Writing Task	13586	983	1110	1231	173
Make-an-Argument	13746	970	1113	1263	203
Critique-an-Argument	13703	967	1104	1234	193

Spring 2009 Sample (student level)	Student Count	25th Percentile	Mean	75th Percentile	Standard Deviation
Performance Task	8835	1035	1166	1291	186
Analytic Writing Task	8726	1101	1226	1360	179
Make-an-Argument	8772	1079	1211	1358	206
Critique-an-Argument	8764	1087	1239	1388	205

7

Fall 2008 Sample (school level)	School Count	25th Percentile	Mean	75th Percentile	Standard Deviation
Performance Task	183	1000	1067	1121	90
Analytic Writing Task	183	1033	1110	1184	106
Make-an-Argument	183	1033	1113	1189	114
Critique-an-Argument	183	1032	1105	1180	102

Spring 2009 Sample (school level)	School Count	25th Percentile	Mean	75th Percentile	Standard Deviation
Performance Task	191	1114	1170	1219	83
Analytic Writing Task	191	1160	1230	1298	95
Make-an-Argument	191	1139	1215	1274	96
Critique-an-Argument	191	1172	1243	1322	98

8 Regression Equations

Some schools may be interested in predicting mean CLA scores for other mean Entering Academic Ability (EAA) scores.

Table 8 below provides the necessary parameters from the regression equations that will allow you to carry out your own calculations on different samples within your Student Data File.

Specifically, identify a sample of students with both CLA and EAA scores. Take the mean EAA score, multiply it by the appropriate slope below, add the intercept, and you are left with a predicted mean CLA score.

Take the difference between the predicted and observed mean CLA scores and divide that by the appropriate standard error to calculate your own deviation score.

8

Fall 2008	Intercept	Slope	Standard Error	R-square
Total CLA Score	349	0.70	44.9	0.79
Performance Task	364	0.67	41.1	0.80
Analytic Writing Task	332	0.74	53.5	0.75
Make-an-Argument	312	0.76	63.8	0.69
Critique-an-Argument	349	0.72	49.3	0.77

Spring 2009	Intercept	Slope	Standard Error	R-square
Total CLA Score	499	0.65	48.6	0.68
Performance Task	496	0.62	44.2	0.72
Analytic Writing Task	488	0.69	52.1	0.71
Make-an-Argument	495	0.67	55.5	0.67
Critique-an-Argument	475	0.71	55.1	0.70

9 Student Data File

In tandem with this report, we provide a CLA Student Data File, which includes over 60 variables across three categories: self-reported information from students in their CLA on-line profile; CLA scores and identifiers; and information provided/verified by the registrar.

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.

Self-Reported Data

- 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

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 entering academic ability (EAA) 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, Student ID
- Year, Administration (Fall or Spring), Type of Test (90 or 180-minute), Date of test

Registrar Data

- Class Standing
- Transfer Student Status
- Program ID and Name (for classification of students into different colleges, schools, fields of study, majors, programs, etc.)
- Entering Academic Ability (EAA) Score
- 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

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