Using the CLA for Improving College Learning Outcomes

Institutional Research and Assessment Councils Joint Retreat
June 15, 2012

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RAYMOND MOY
UNIVERSITY DIRECTOR OF ASSESSMENT

AGENDA

- Orient IR and Assessment Council members to the purpose and design of the CLA

- Highlight what the CLA does and does not do

- Demystify CLA scoring and score interpretation and how IR and Assessment can use the CLA to support their work

- Provide a preview for the implementation of the CLA at all CUNY colleges in Fall 2012.

From Middle States Commision on Higher Education (2005).   Assessing Student Learning and Institutional Effectiveness: Understanding Middle States Expectations
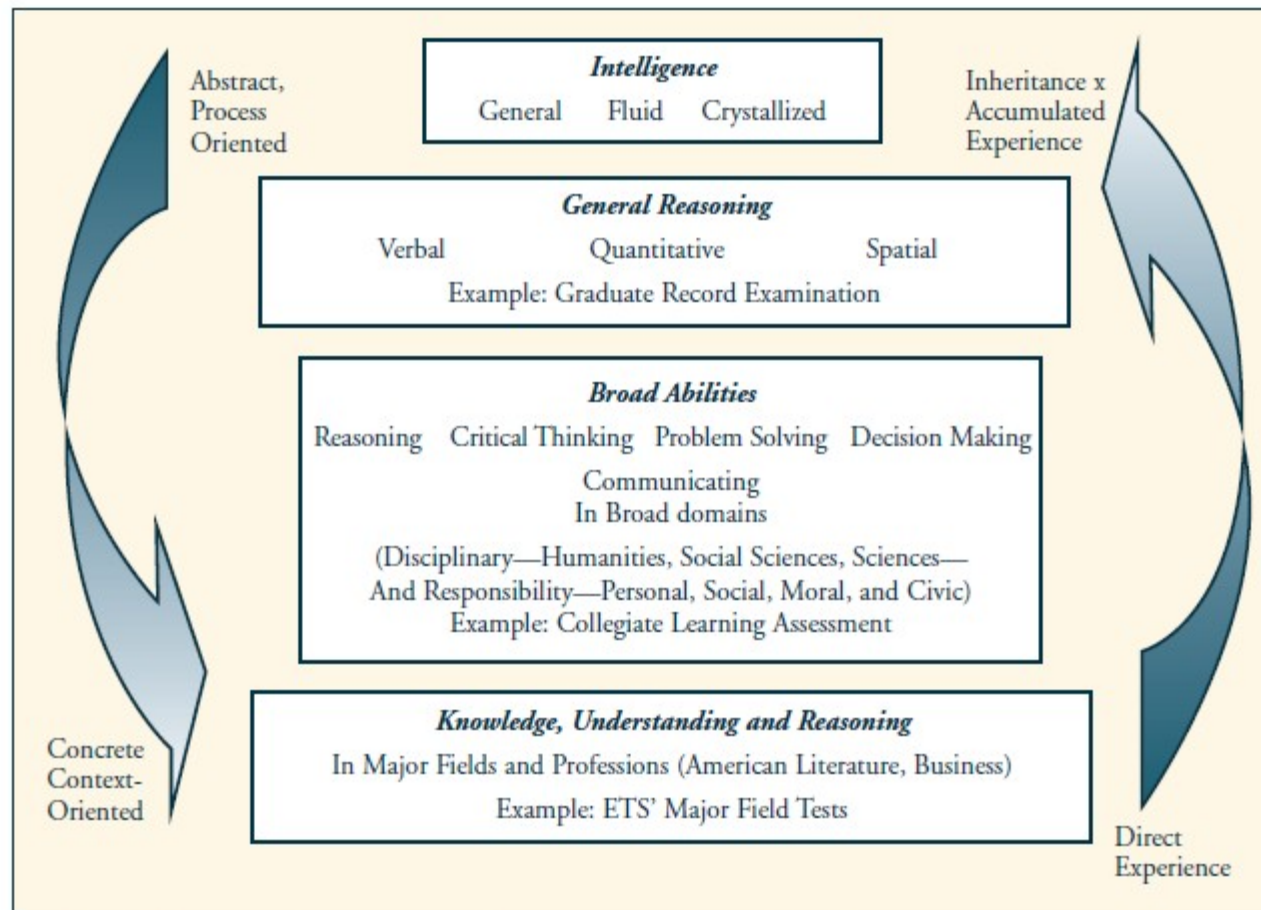
Design of the CLA

Figure 1. Framework for student learning outcomes. (Adapted from Shavelson and Huang 2003, 14.)

- Developing clearly articulated written statements, expressed in observable terms, of key learning outcomes;

- Designing courses, programs that provide intentional opportunities for students to achieve those learning outcomes;

- Assessing student achievement of those key learning outcomes; and

- Using the results of those assessments to improve teaching and learning.

Improvement versus Accountability

Two Paradigms of Assessment

	Assessment for Improvement Paradigm	Assessment for Accountability Paradigm
Strategic Dimensions		
Intent	Formative (Improvement)	Summative (Judgment)
Stance	Internal	External
Predominant Ethos	Engagement	Compliance
Application Choices		
Instrumentation	Multiple/Triangulation	Standardized
Nature of Evidence	Quantitative and Qualitative	Quantitative
Reference Points	Over Time, Comparative, Established Goal	Comparative or Fixed Standard
Communication of Results	Multiple Internal Channels and Media	Public Communication
Uses of Results	Multiple Feedback Loops	Reporting

From Ewell, P. T. (2009, November). **Assessment, accountability, and improvement: Revisiting the tension**. (NILOA Occasional Paper No.1). Urbana, IL: University of Illinois and Indiana University, National Institute for Learning Outcomes Assessment

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- **Standard 12: General Education**

  The institution's curricula are designed so that students acquire and demonstrate college-level proficiency in general education and essential skills, including at least oral and written communication, scientific and quantitative reasoning, critical analysis and reasoning, and technological competency.

- **Standard 14: Assessment of Student Learning**

  Assessment of student learning demonstrates that, at graduation, or other appropriate points, the institution's students have knowledge, skills, and competencies consistent with institutional and appropriate higher education goals.

PMP Goal – Improve Student Success

1. Colleges will provide students with a cohesive and coherent general education
2. Colleges will improve basic skills and ESL outcomes
3. Colleges will improve student academic performance, particularly in the first 60 credits of study
4. Colleges will reduce performance gaps among students from underrepresented groups and/or gender
5. Colleges will show progress on implementing faculty-driven assessment of student learning

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Overview of CLA: Performance Task

- Students have 90 minutes to respond to open-ended questions about a hypothetical but realistic situation

- Includes a document library consisting of a range of sometimes conflicting information sources, such as memos, summaries of research reports, articles, maps, photographs, charts, and interview notes

- Students expected to base their responses on an analysis and synthesis of information presented

- See for sample tests: http://starttest.com/7.0.0.1/programs/clacross/Practice%20Test%20Page.htm

- Scoring criteria: http://www.collegiatelearningassessment.org/files/CLAScoringCriteria.pdf

- ***Make an Argument***:
  - students have 45 minutes to support or reject an opinion expressed in a prompt.

- ***Critique an Argument:***
  - students have 30 minutes to evaluate an argument based on how well reasoned they find it to be.

Performance Task

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?

Analytic Writing Tasks

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.

Performance Task Scoring Criteria

Performance Task Scoring Criteria

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	Analytic Reasoning & Evaluation	Writing Effectiveness	Writing Mechanics	Problem Solving
	Interpreting, analyzing, and evaluating the quality of information. This entails identifying information that is relevant to a problem, highlighting connected and conflicting information, detecting flaws in logic and questionable assumptions, and explaining why information is credible, unreliable, or limited.	Constructing organized and logically cohesive arguments. Strengthening the writer's position by providing elaboration on facts or ideas (e.g., explaining how evidence bears on the problem, providing examples, and emphasizing especially convincing evidence).	Facility with the conventions of standard written English (agreement, tense, capitalization, punctuation, and spelling) and control of the English language, including syntax (sentence structure) and diction (word choice and usage).	Considering and weighing information from discrete sources to make decisions (draw a conclusion and/or propose a course of action) that logically follow from valid arguments, evidence, and examples. Considering the implications of decisions and suggesting additional research when appropriate.
6	• Identifies most facts or ideas that support or refute all major arguments (or salient features of all objects to be classified) presented in the Document Library. Provides analysis that goes beyond the obvious. • Demonstrates accurate understanding of a large body of information from the Document Library. • Makes several accurate claims about the quality of information.	• Organizes response in a logically cohesive way that makes it very easy to follow the writer's arguments. • Provides valid and comprehensive elaboration on facts or ideas related to each argument and clearly cites sources of information.	• Demonstrates outstanding control of grammatical conventions. • Consistently writes well-constructed, complex sentences with varied structure and length. • Displays adept use of vocabulary that is precise, advanced, and varied.	• Provides a decision and a solid rationale based on credible evidence from a variety of sources. Weighs other options, but presents the decision as best given the available evidence. When applicable: • Proposes a course of action that follows logically from the conclusion. Considers implications. • Recognizes the need for additional research. Recommends specific research that would address most unanswered questions.
5	• Identifies several facts or ideas that support or refute all major arguments (or salient features of all objects to be classified) presented in the Document Library. • Demonstrates accurate understanding of much of the Document Library content. • Makes a few accurate claims about the quality of information.	• Organizes response in a logically cohesive way that makes it fairly easy to follow the writer's arguments. • Provides valid elaboration on facts or ideas related to each argument and cites sources of information.	• Demonstrates very good control of grammatical conventions. • Consistently writes well-constructed sentences with varied structure and length. • Uses varied and sometimes advanced vocabulary that effectively communicates ideas.	• Provides a decision and a solid rationale based largely on credible evidence from multiple sources and discounts alternatives. When applicable: • Proposes a course of action that follows logically from the conclusion. May consider implications. • Recognizes the need for additional research. Suggests research that would address some unanswered questions.
	• Identifies a few facts or ideas that support or refute all major arguments (or salient features of all objects to be classified) presented in the Document Library.	• Organizes response in a way that makes the writer's arguments and logic of those arguments apparent but not obvious. • Provides valid elaboration on facts	• Demonstrates good control of grammatical conventions with few errors. • Writes well-constructed sentences with some varied structure and length. • Uses vocabulary that clearly communi-	• Provides a decision and credible evidence to back it up. Possibly does not account for credible, contradictory evidence. May attempt to discount alternatives.

Make an Argument Scoring Criteria

	Analytic Reasoning & Evaluation	Writing Effectiveness	Writing Mechanics
	Stating a position, providing valid reasons to support the writer's position, and demonstrating an understanding of the complexity of the issue by considering and possibly refuting alternative viewpoints.	Constructing an organized and logically cohesive argument. Strengthening the writer's position by elaborating on the reasons for that position (e.g., providing evidence, examples, and logical reasoning).	Facility with the conventions of standard written English (agreement, tense, capitalization, punctuation, and spelling) and control of the English language, including syntax (sentence structure) and diction (word choice and usage).
6	• Asserts an insightful position and provides multiple (at least 4) sound reasons to justify it. • Provides analysis that reflects a thorough consideration of the complexity of the issue. Possibly refutes major counterarguments or considers contexts integral to the issue (e.g., ethical, cultural, social, political).	• Organizes response in a logically cohesive way that makes it very easy to follow the writer's argument. • Provides valid and comprehensive elaboration on each reason for the writer's position.	• Demonstrates outstanding control of grammatical conventions. • Consistently writes well-constructed, complex sentences with varied structure and length. • Displays adept use of vocabulary that is precise, advanced, and varied.
5	• States a thoughtful position and provides multiple (at least 3) sound reasons to support it. • Provides analysis that reflects some consideration of the complexity of the issue. Possibly considers contexts integral to the issue (e.g., ethical, cultural, social, political).	• Organizes response in a logically cohesive way that makes it fairly easy to follow the writer's argument. • Provides valid elaboration on each reason for the writer's position.	• Demonstrates very good control of grammatical conventions. • Consistently writes well-constructed sentences with varied structure and length. • Uses varied and sometimes advanced vocabulary that effectively communicates ideas.
4	• States a clear position and some (2-3) sound reasons to support it. • Provides some careful analysis, but it lacks consideration of the issue's complexity.	• Organizes response in a way that makes the writer's argument and its logic apparent but not obvious. • Provides valid elaboration on reasons for the writer's position several times.	• Demonstrates good control of grammatical conventions with few errors. • Writes well-constructed sentences with some varied structure and length. • Uses vocabulary that clearly communicates ideas but lacks variety.
3	• States or implies a position and provides few (1-2) reasons to support it. • Provides some superficial analysis of the issue.	• Provides a limited or somewhat unclear argument. Presents relevant information, but that information is not woven into an argument. • Provides valid elaboration on reasons for the writer's position a few times.	• Demonstrates fair control of grammatical conventions with frequent minor errors. • Writes sentences that read naturally but tend to have similar structure and length. • Uses vocabulary that communicates ideas adequately but lacks variety.
2	• States or implies a position and provides vague or very few reasons to support it. • Provides little analysis, and that analysis may reflect an oversimplification of the issue.	• Provides limited, invalid, overstated, or very unclear argument. May present information in a disorganized fashion or undermine own points. • Any elaboration on reasons for the writer's position tend to be vague, irrelevant, inaccurate, or unreliable (e.g., based entirely on writer's opinion).	• Demonstrates poor control of grammatical conventions with frequent minor errors and some distracting errors. • Consistently writes sentences with similar structure and length, and some may be difficult to understand. • Uses simple vocabulary, and some vocabulary may be used inaccurately or in a way that makes meaning unclear.
	• States an unclear position (if any) and fails to pro-	• Fails to develop a convincing argument. The writing	• Demonstrates minimal control of grammatical con-

Critique an Argument Scoring Criteria

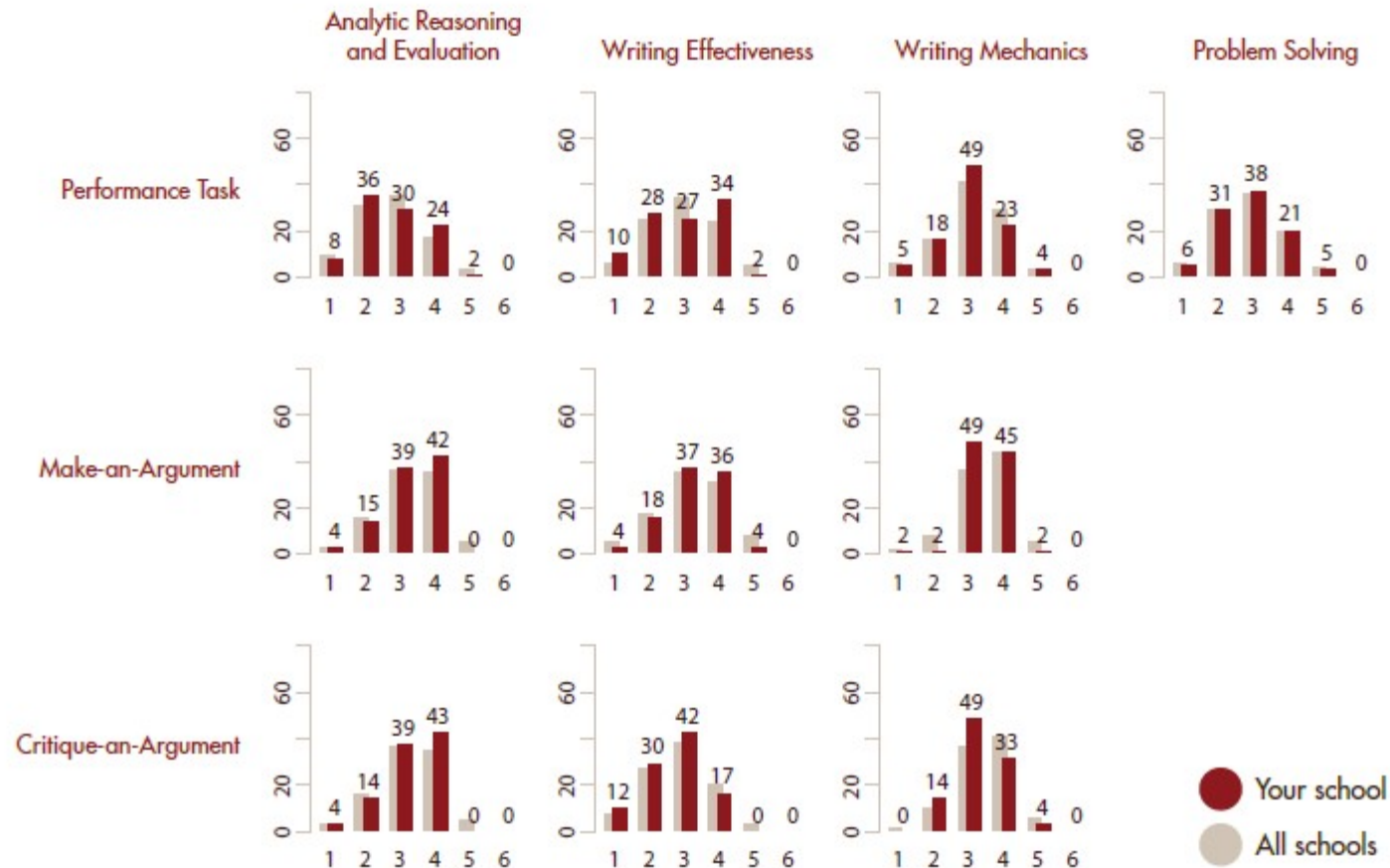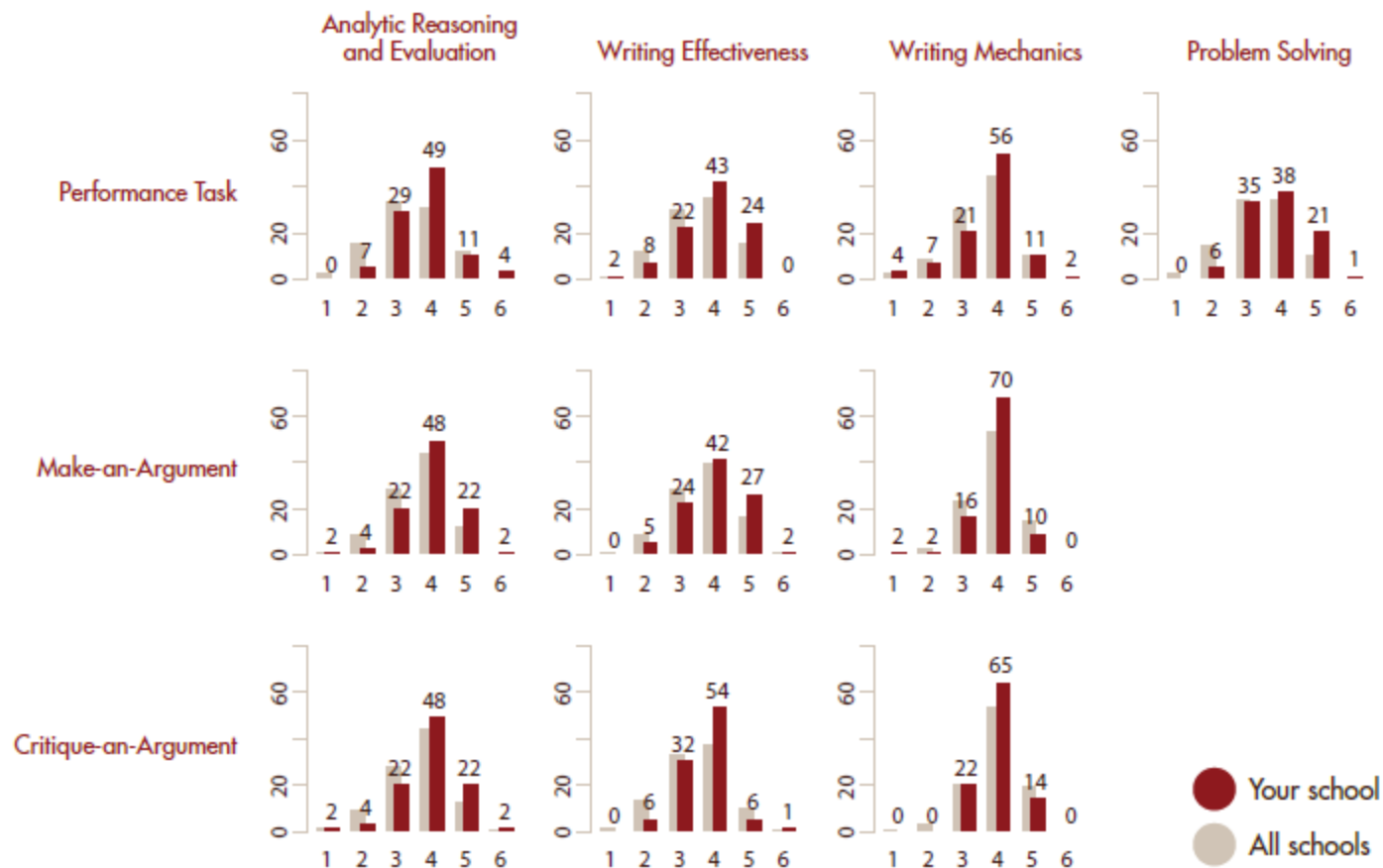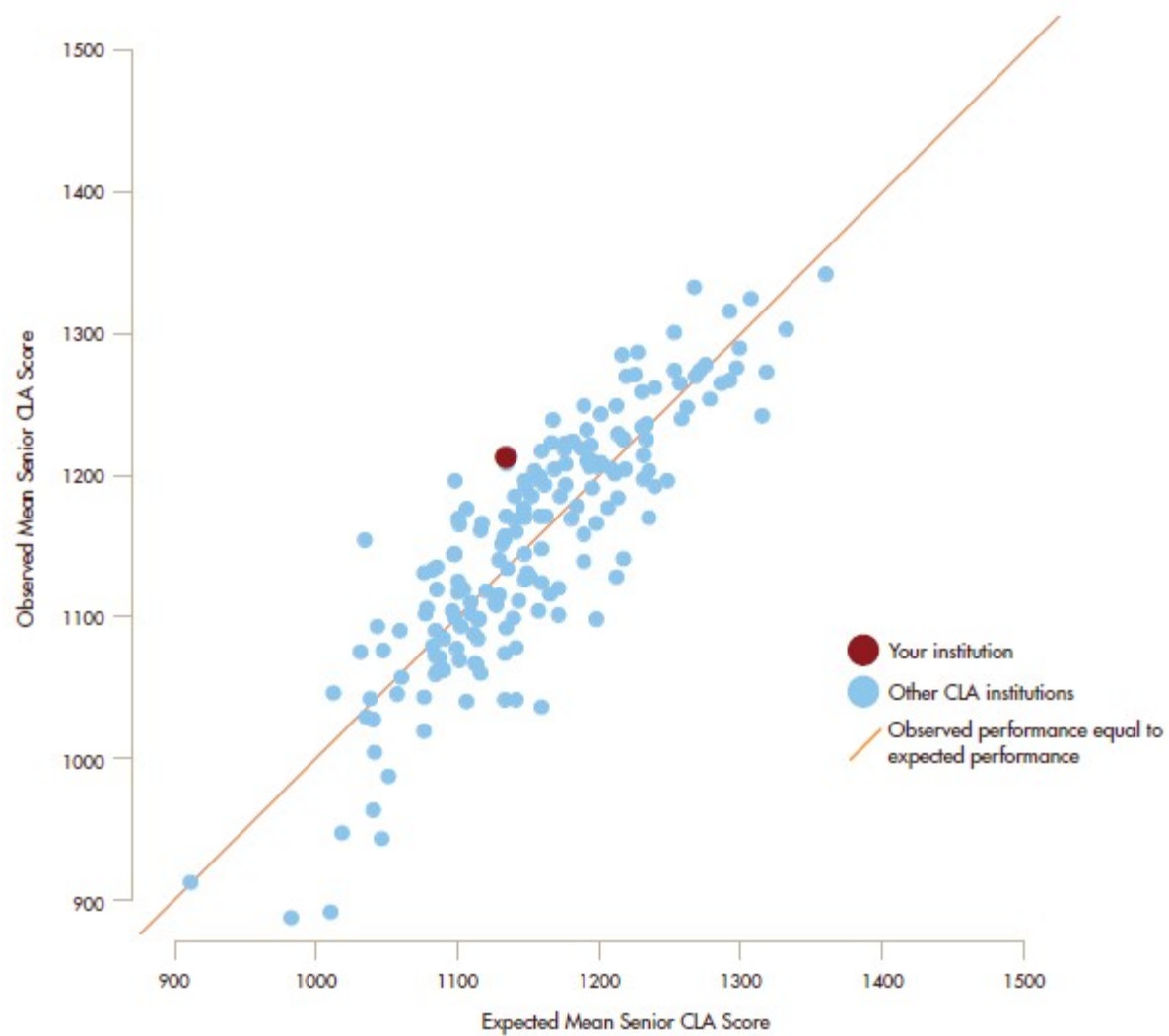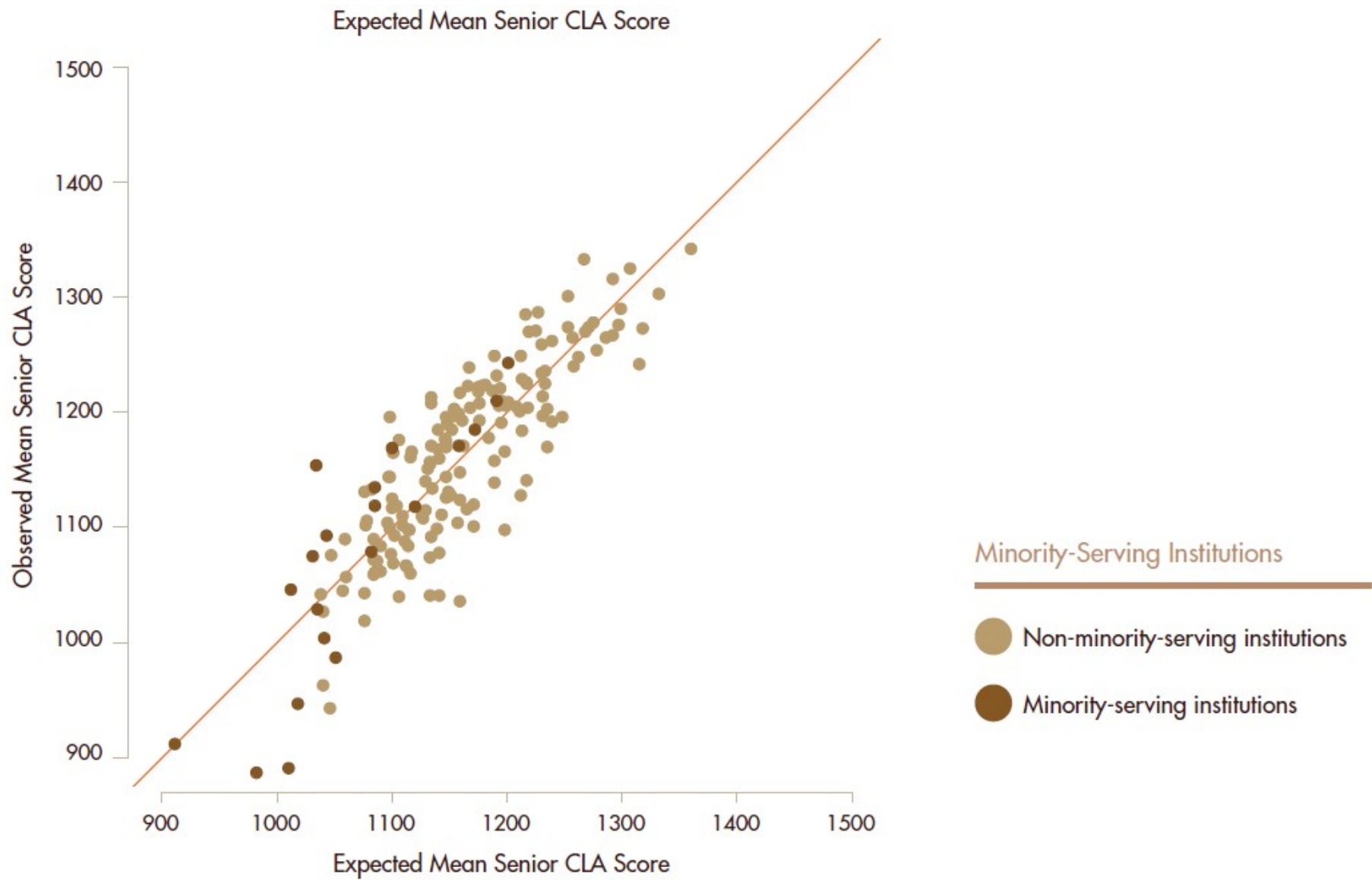|	Analytic Reasoning & Evaluation	Writing Effectiveness	Writing Mechanics
	Interpreting, analyzing, and evaluating the quality of information. This entails highlighting conflicting information, detecting flaws in logic and questionable assumptions, and explaining why information is credible, unreliable, or limited.	Constructing organized and logically cohesive arguments. Strengthening the writer's position by elaborating on deficiences in the argument (e.g., providing explanations and examples).	Facility with the conventions of standard written English (agreement, tense, capitalization, punctuation, and spelling) and control of the English language, including syntax (sentence structure) and diction (word choice and usage).
6	• Demonstrates accurate understanding of the complete argument. • Identifies many (at least 5) deficiencies in the argument and provides analysis that goes beyond the obvious.	• Organizes response in a logically cohesive way that makes it very easy to follow the writer's critique. • Provides valid and comprehensive elaboration for each identified deficiency.	• Demonstrates outstanding control of grammatical conventions. • Consistently writes well-constructed, complex sentences with varied structure and length. • Displays adept use of vocabulary that is precise, advanced, and varied.
5	• Demonstrates accurate understanding of much of the argument. • Identifies many (at least 4) deficiencies in the argument.	• Organizes response in a logically cohesive way that makes it fairly easy to follow the writer's critique. • Provides valid elaboration for each identified deficiency.	• Demonstrates very good control of grammatical conventions. • Consistently writes well-constructed sentences with varied structure and length. • Uses varied and sometimes advanced vocabulary that effectively communicates ideas.
4	• Demonstrates accurate understanding of several aspects of the argument, but disregards a few. • Identifies several (at least 3) deficiencies in the argument.	• Organizes response in a way that makes the writer's critique and its logic apparent but not obvious. • Provides valid elaboration on identified deficiencies several times.	• Demonstrates good control of grammatical conventions with few errors. • Writes well-constructed sentences with some varied structure and length. • Uses vocabulary that clearly communicates ideas but lacks variety.
3	• Disregards several aspects of the argument or makes minor misinterpretations of the argument. • Identifies a few (2-3) deficiencies in the argument.	• Provides a limited or somewhat unclear critique. Presents relevant information, but that information is not woven into an argument. • Provides valid elaboration on identified deficiencies a few times.	• Demonstrates fair control of grammatical conventions with frequent minor errors. • Writes sentences that read naturally but tend to have similar structure and length. • Uses vocabulary that communicates ideas adequately but lacks variety.
2	• Disregards or misinterprets much of the information in the argument. • Identifies very few (1-2) deficiencies in the argument and may accept unreliable evidence as credible.	• Provides limited, invalid, overstated, or very unclear critique. May present information in a disorganized fashion or undermine own points. • Any elaboration on identified deficiencies tends to be vague, irrelevant, inaccurate, or unreliable (e.g., based entirely on writer's opinion).	• Demonstrates poor control of grammatical conventions with frequent minor errors and some distracting errors. • Consistently writes sentences with similar structure and length, and some may be difficult to understand. • Uses simple vocabulary, and some vocabulary may be used inaccurately or in a way that makes meaning unclear.

- Raw scores for each task and task scoring dimension

- Observed learning gains - freshmen to seniors

- CLA Scaled scores

- CLA Expected scores based on SAT's

- Value-added score: difference between expected and actual

- Data files

Freshmen: Distribution of Subscores

Expected Mean Senior CLA Score

Minority-Serving Institutions

- Non-minority-serving institutions
- Minority-serving institutions

Value-Added and Precision Estimates

3.1

	Performance Level	Value-Added Score	Value-Added Percentile Rank	Confidence Interval Lower Bound	Confidence Interval Upper Bound
Total CLA Score	Above	1.80	97	1.22	2.41
Performance Task	Above	1.50	94	0.96	2.32
Analytic Writing Task	Above	1.61	95	0.92	2.30
Make-an-Argument	Above	1.10	88	0.40	1.89
Critique-an-Argument	Above	1.98	98	0.98	2.46

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- Longitudinal vs. cross-sectional design

- Sampling design:
    - Community colleges: incoming freshmen, students nearing 60 credits
    - Baccalaureate colleges: incoming freshmen, students nearing 120 credits

- Freshmen sample: reflect diversity of population, including remedial and ESL

- Baccalaureate samples nearing 60 credits and nearing graduation: include transfer students

Achieving a Representative Sample and Motivating Students

- Sample size needed for subgroup analysis

- Drawing random samples

- Achieving representative samples

- Recruitment: cash payments, institutional incentives

- Motivation: lottery/ prize incentives, institutional incentives