## Executive Summary 2010-2011 Collegiate Learning Assessment at UW-La Crosse Dr. Patrick Barlow, University Assessment Coordinator

The University of Wisconsin-La Crosse participated in the Collegiate Learning Assessment (CLA) for the second time during the 2010-2011 academic year. Our results indicated continued success in helping students learn skills related to the critical abilities of effective use of information, critiquing arguments, and construction of arguments. UW-L makes use of the CLA as part of our program of university wide assessment and to help serve as a corollary measure of general education student learning outcomes.

The CLA is designed to measure an institution's contribution, or *value added*, to the development of students' critical thinking, analytic reasoning, problem solving and written communication skills.

The CLA includes two types of testing tasks:

1. *Performance Tasks* place students in a "real-life" activity (such as preparing a memo or policy recommendation) in which they must review and evaluate information in a document library to answer questions or solve problems. Completion of a Performance Task measures students' demonstrated ability to interpret, analyze and synthesize information.

2. Analytic Writing Tasks present students with a topic or issue. They must either evaluate the issue ("Critique-an-Argument) or develop a position on the issue ("Make-an-Argument). These tasks evaluate students' 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.

The tasks are designed to be appropriate for college students across a wide range of undergraduate academic majors and general education programs (see Appendix A: CLA Task Types).

**Who took the test at UWL?** One hundred ten (110) new freshmen took the test in fall 2010 and 107 native seniors (i.e., seniors who started as freshmen at UWL) in spring 201. The groups are representative of the freshmen and senior classes, with two exceptions. Both groups were slightly overrepresented by females (freshmen CLA group = 68% female and the senior CLA group = 79% female) compared to the percentage of eligible non-participating freshmen females (60%), and senior females (68%). The entering academic ability of the first year student participants (Avg. ACT = 24) was similar to the average ACT of the entering first year class as a whole (Avg. ACT = 25). For Senior CLA participants, their average entering academic ability (Avg. ACT = 26) was close to that of their eligible non-participating peers (Avg. ACT = 25) while their mean cumulative GPA as of the spring testing was 3.47, slightly higher than the cumulative GPA of the eligible non-participating Senior peers (Avg. GPA = 3.36)

**Results.** Table 1 reports the mean Actual Scores for each CLA task and the percentile ranks for UWL freshmen and seniors. As shown, the scores vary from the 56<sup>th</sup> to the 96<sup>th</sup> percentile indicating that UWL students scored above the mean on all the CLA tasks compared to students at other institutions.

Task	Freshmen	Freshman	Senior	Senior	
	CLA Score	Percentile Rank	CLA Score	Percentile Rank	
Total CLA Score	1078	62	1285	94	
Performance Task	1072	61	1306	96	
Analytic Writing Tasks	1084	63	1263	91	
Make-an-Argument	1104	71	1248	89	
Critique-an-Argument	1063	56	1279	89	
Entering Academic Ability	1125	76	1181	85	

Table 1: Percentile Rank for Mean CLA Scores of UWL Students

A unique feature of the CLA is that it allows for the calculation of estimates of the magnitude of growth or *value added* to student ability. To do this, a value added score is calculated by taking into account the senior students' actual CLA average performance and comparing it to an expected CLA average score. This expected performance level is based on a prediction equation that uses seniors' entering academic ability (i.e. ACT/SAT score), average CLA performance of the first year students. The valued added score for our current overall CLA results is 1.59 which places us at the Above Expected category and at a level above 96% of the other schools who took the test in 2010-2011. Table 2 shows the results of the value added scores across the other subtasks of the test.

Task	Value Added Score	Value-Added Percentile Rank	Performance Level			
Total CLA Score	1.59	96	Above Expected			
Performance Task	1.70	96	Above Expected			
Analytic Writing Tasks	1.04	85	Above Expected			
Make-an-Argument	0.72	75	Near Expected			
Critique-an-Argument	1.14	88	Above Expected			
**Value Added Score= Degree to which observed UWL senior mean CLA score meets, exceeds, or falls below expectation set by Seniors entering academic ability (ACT/SAT score) and mean CLA performance of UWL freshmen. Value Added Scores = -1.00 to 1.00 are Near Expected, 1.00 to 2.00 are Above Expected, -1.00 to -2.00 are Below Expected, +2.00 and higher are Well Above Expected, -2.00 and lower are Well Below Expected.						

Table 2: Percentile Ranks for Value Added Scores\*\* of UWL Students

Another unique feature of the CLA for the 2010-11 administration period was the production of specific ratings in the areas of analytic reasoning/evaluation, writing effectiveness, writing mechanics, and problem solving. These scores were produced both for First Year and Senior Students. What is important to note is that while many our ratings for First Year students are on par with students at other universities, our senior students average scores in these areas began to rise above the comparison group in every area. Senior students average scores, shown in Table 3, indicate levels of performance close the maximum rating of 6 in each area.

		Analytic Reasoning & Evaluation		Writing Effectiveness		Writing Mechanics		Problem Solving	
		UW-L	All Schools	UW-L	All Schools	UW-L	All Schools	UW-L	All Schools
Performance Task	Mean score	4.2	3.4	4.3	3.5	4.1	3.5	4.2	3.4
	Standard Deviation	0.9	0.9	0.7	0.9	0.7	0.8	0.7	0.9
Make-An- Argument	Mean score	4.1	3.6	4.3	3.7	4.2	3.8		
	Standard Deviation	0.8	0.8	0.8	0.9	0.6	0.7		
Critique-An- Argument	Mean score	4.0	3.3	4.0	3.4	4.3	3.9		
	Standard Deviation	0.8	0.9	0.8	0.9	0.6	0.7		

Table 3: Senior Average CLA Ratings Across the 3 Tasks

# Appendix A: CLA Task Types\*

## Performance Tasks

Each 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 yet realistic situation. Students have access to a document library that includes material such as newspaper articles, photographs, memos, summaries of research reports, maps, tables, diagrams and interview transcripts. Students are instructed to use these materials in preparing their answers to the questions. They are given 90 minutes for the task.

*Example 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?

## Make an Argument

Presents an opinion on an 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.

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

## Critique an Argument

Asks students to evaluate an argument by discussing how well reasoned they find it to be (rather than simply agreeing or disagreeing with the position stated). Students have 30 minutes to complete this essay.

Example: 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 their 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.

\* From 2007-2008 CLA Technical Appendices, Appendix D: Description of CLA Tasks and Scores

#### Appendix B: Combinations of Skills Used on CLA Tasks\*

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:

*Performance Tasks:* 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 to support a position on an issue. 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.

\* From 2007-2008 CLA Technical Appendices, Appendix C: Examining Performance across Task Types