OIR Assessment Tool
Collegiate Learning Assessment (CLA)
AY 2009-2010

Purpose of Survey: *The Collegiate Learning Assessment (CLA) is an open-ended question test designed to measure the impact an institution has on the learning ability of its students. The CLA results are intended to assist campuses in following a continuous improvement model in order to enhance the (teaching and) learning of higher order skills. Campuses are also encouraged to compare their student learning results on the CLA with those of students from other institutions to provide a reference point for where their students rank compared to other institutions.*

Methodology: *CLA is administered to Freshmen and Senior. This permits (a) comparison of both cohorts to students at peer institutions, (b) allows changes to be measured from freshman to senior year, and (c) allows comparison of those changes with results from peer institutions.*

CLA is not a typical true-false or short-answer survey. Instead, it is case-based and scenario-based. Students are given one of two kinds of tasks: (1) a case-based problem to solve/interpret based on a fictitious real-life situation. Students receive information of various sorts and have to use it to answer questions and come to conclusions. There are no "correct" answers, so scoring is done using well-tested rubrics. Students receive an overall score, and also scores on some specific subscales. (2) an analytical writing task that involves making an argument or critiquing an argument made by someone else.

Value of Results: *CLA is an attempt to measure learning gains associated primarily with higher order thinking and reasoning skills. So, it is potentially of great value and can/could serve a valuable planning tool.   We are just starting CLA at UND and will have to wait a few years before this value can be realized. So, in a few years we may decide that CLA is the best thing ever, or we may decide that it is not worth the time and $ we invest. Although the results can be used to compare UND to other institutions, such comparisons may have minimal value because of demographic and other differences. More important will be to look at gains from freshman to senior year and (1) see how they vary from year to year, (2) decide whether they need to be improved and, if so, how.*

1. The data collected addresses information relating to what university group or situation? (I.e., from whom is the university collecting this information? Whose perceptions are we reading?)
   University Freshman (111) and Seniors (108).

2. *How often is this tool used and analyzed? What time of year? Annually. This was the first time the University of North Dakota participated in the CLA.*

3. To whom does the assessment group believe that an analysis of this report would be beneficial? In other words, what individuals, departments, or programs need this information in order to have reliable information to 'close the loop' on their assessment process?

   This information is of most importance to those who are looking at UND's academic "big picture." That means primarily the *Provost and people in the Provost's Office*.

   College Deans and staff at the *Student Success Center* may also benefit.

   The results will be of less immediate value to *individual faculty*.

4. Are there findings which may be of potential interest to other parties on campus? Who should be encouraged to access these findings?
   See item 3 above

5. Who is responsible to provide the assessment group the information for this report?
   The Office of Institutional Research (OIR)

6. What UND student learning goals are assessed?

   a. Use Y, N, ? to indicate whether the instrument collects data relevant to each of the following Institutional and/or General Education goals:

   ___Y____ 1 Communication – written or oral ("able to write and speak in various settings with a sense of purpose/audience")
   ___Y____ 2 Thinking and reasoning – critical thinking (or "be intellectually curious"; analyze, synthesize, evaluate)
   ____Y___ 3 Thinking and reasoning – creative thinking (or "be intellectually creative"; explore, discover, engage)
   ___Y____ 4 Thinking and reasoning – quantitative reasoning ("apply empirical data…analyze graphical information")
   _____ 5 Information literacy ("be able to access and evaluate…for effective, efficient, and ethical use")
   _____ 6 Diversity ("demonstrate understanding of diversity and use that understanding…")
   ___?____ 7 Lifelong learning ("commit themselves to lifelong learning")
   _____ 8 Service/citizenship ("share responsibility both for their communities and for the world")

   b. Additional goals

7. What are the findings/results of this tool?

   a. From Question 5a above: For the goals with a Y or ?, describe the relevant findings/results from this survey:

   The CLA presents students with realistic problems that they respond to in writing. Their responses are graded to assess their abilities to think critically, reason analytically, solve problems and communicate clearly and persuasively. The mean scorse for freshmen performance on most subscales of the CLA was in the 90th percentile and above (compared to students at peer institutions), while mean scores for the seniors clustered around the 80th percentile.

   b. Other findings/results

   Besides the raw comparison to other schools, CLA scores are also used to determine how much learning (termed "value added" by CLA) has occurred during students' years at UND. Results show that our value added score is only average compared to other schools, ranking us in the 40-60%ile in the various subscales.

8. What evidence is provided or should be provided to support the results of the survey?

   Results, scores, statistics . . . it is all there.

9. What evidence does the assessment group believe should be collected/compiled for the next accreditation visit?

   Any information regarding the institution's performance compared to other CLA campuses will be important to track. As stated above, however, it may be more important to monitor how UND CLA results change from year to year.

10. Is this tool a direct measure, an indirect measure, or a non-measure of student learning?

    Direct Measure.

11. Does this tool empower individuals or the university to better understand and assess student learning at the university? If so, how?

    Yes. (If it works as it is supposed to.) This tool gives the university an opportunity tomeasure learning at UND, and to compare learning by UND student with learning by students from other campuses around the country, in the areas of written communication, critical thinking, analytical reasoning and problem solving when given cognitively demanding tasks.

12. Is there a better way to obtain or report the data to be analyzed?
    No

13. Does the tool reflect a culture of assessment at UND?
    Yes, this tool ties in quite well with the UND student learning goals.

14. Does the tool need increased university or administrative support or faculty
    involvement in order to make it more useable or effective?
    *If this tool is going to be used to guide future planning, then it will be important
    for the institution to ensure that the faculty are aware of the existence of this tool
    and its relevance to the campus' assessment goals.*

15. Does the assessment group need any administrative insight or guidance in order to
    analyze the tool effectively?
    No

16. What value does the committee place on this tool for helping to achieve the
    university's assessment plan?
    Too soon to tell.

18. Review Summary (one or two sentences)
    *The ClA measures the impact an institution has on the learning ability of its
    students by grading student responses to an open ended question test. The
    results/findings are charted on a graph, giving institutions a way to monitor
    learning gains, and to compare their students' abilities with other CLA
    participating students.*

19. Recommendations of the Reviewers
    See #14, above.

20. What might faculty want to know about this survey? (*Please provide one to two
    paragraphs describing some findings from this survey. These paragraphs will be
    forwarded to academic departments as a means of keeping them informed about
    the existence of information that might be useful to them.*)

See the attached information (clip) describing CLA. It has all the information that faculty might want to know at this time.

Submitted by: Dexter Perkins and Jo-Anne Yearwood
Date of Submission:

Form revised: 11/2/09

The Office of Institutional Research (OIR) produces *Research Clips* to provide the university community a brief report on a variety of topics. In most cases the "clips" are from a more detailed research project or survey analysis which can be found on the OIR website at http://www.und.edu/dept/datacol/index.html.

The Collegiate Learning Assessment

Discussion and results of UND's recent participation in the CLA testing.

[cla]

The Collegiate Learning Assessment

What is it?

The Collegiate Learning Assessment (CLA), launched in 2000 by the Council for Aid to Education, is an open-ended question test designed to measure the impact of an institution upon the learning ability of its students. The University of North Dakota, for the first time, participated in the CLA during the 2009-2010 school year with 111 freshman and 108 senior students donating their time and effort. Thank you to all that participated in this important and unique study.

CLA testing was administered via computer and proctored by members of the University Assessment Committee. Participants were presented with either a "performance task" which asked them to respond to a real-life situation (write a memo, present findings, or make a crucial decision) or an "analytic writing task" in which they were asked to either make an argument or critique an argument. Participants were presented the initial problem and were supplied documents (figures, graphs, press releases, articles, etc.) to use to construct their answer.

How is testing scored?

CLA testing operates under a "value-added model" that takes into account the average academic ability of entering students for a given institution. In short, the model predicts the average CLA score of participating seniors and compares it to the actual (observed) scores seniors receive upon completion of the test. In more detail, the model uses the average entering academic ability (EAA) of the senior participants and the average freshman CLA score (CLA_f) to predict the average senior CLA score (CLA_s). The average EAA is established by the senior participants' ACT or SAT scores (ACT scores are converted to SAT using a crosswalk table, e.g. 22 =1030, 28 =1260, 34 =1510).

The actual, or observed, senior CLA scores are then compared to the predicted CLA scores by computing the difference and converting to a standardized scale.

Scores higher than expected are interpreted as "value added" in that the learning ability of seniors has progressed farther than expected based on the CLA model. Institutions that score lower are interpreted as falling short of predicted added learning ability. Scores around 0 (-1 to +1) are interpreted as "near expected." More information regarding the model, the scoring procedures, the methodology, and ranking descriptions can be found on our website.

How are the scores interpreted?

According to the CLA report, "Value-added scores are properly interpreted as senior average CLA performance relative to the typical school testing students with similar academic skills upon entering college." They also caution that "a high value-added score does not necessarily indicate high absolute performance on the CLA. Schools with low absolute CLA performance may obtain high value-added scores by performing well relative to expected… likewise, schools with high absolute CLA performance may obtain low value-added scores by performing poorly relative to expected."

For more detailed information about any of our surveys, please refer to http://www.und.edu/dept/datacol/reports/surveydesc.html

This model allows for comparisons to be made between schools that admit students with similar academic ability. While a comparison across all schools participating in the CLA is "technically acceptable" the CLA report warns researchers that "this is not the preferred interpretation because it encourages comparisons among disparate institutions."

UND Results

Two hundred nineteen UND students (111 freshmen, 108 seniors) participated in the CLA. The computer-based CLA was administered to freshman participants from September 14-17, 2009, and to senior participants February 22-25, 2010. Table 1 presents the demographic breakdown of the CLA participants.

Table 1. Demographics	Number of Freshmen	Number of Seniors	Total
Gender			
Male	39	48	87
Female	72	59	131
Decline to State	0	1	1
Field of Study			
Sciences and Engineering	16	27	43
Social Sciences	7	22	29
Humanities & Languages	4	9	13
Business	12	23	35
Helping/Services	33	17	50
Undecided/Other/N/A	39	10	49
Race/Ethnicity			
American Indian/Alaska Native	2	2	4
Asian/Pacific Islander	0	1	1
Black, Non-Hispanic	0	0	0
Hispanic	1	0	1
White, Non-Hispanic	105	98	203
Other	1	0	1
Decline to State	2	7	9

Mean freshmen performance on the CLA was quite good with total scores and sub-part scores landing in the 90th percentile and above. Mean senior performance placed in the average to above-average category with scores clustered around the 80th percentile. Note that the senior mean scores are higher than freshmen mean scores even though

freshmen percentile scores are higher. Naturally, students should improve over the course of their college career, which is the process that the CLA hopes to capture and measure. Tables 2 and 3 present the breakdown of freshmen and senior unadjusted performance results.

Table 2. Unadjusted Freshman Performance	Number of Freshmen	Mean Score	Mean Score Percentile Rank
Total CLA Score	111	1219	92
Performance Task	56	1191	90
Analytic Writing Task	55	1248	91
Make-an-Argument	55	1255	90
Critique-an-Argument	55	1240	90
EAA	111	1150	81

Table 3. Unadjusted Senior Performance	Number of Seniors	Mean Score	Mean Score Percentile Rank
Total CLA Score	108	1269	79
Performance Task	54	1222	80
Analytic Writing Task	54	1316	82
Make-an-Argument	54	1289	78
Critique-an-Argument	54	1342	84
EAA	108	1124	72

Table 4 presents the value-added scores, which are the core dimension of the CLA study. As can be seen, senior CLA scores resulted in positive value-added scores in every category, except for the Make-an-Argument dimension of the Analytic Writing Task. However, the scores are all within + or - 1 with value-added percentile ranks hovering around 50-60th, meaning that UND performed "near expected" given the

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Entering Academic Ability (EAA) of the students enrolling at UND. In the percentile ranks for the total CLA score, UND ranked higher than 57% of the other participating schools.

Table 4. Value-Added and Precision Estimates	Performance Level	Value-Added Score	Value-Added Percentile Rank
Total CLA Score	Near	0.17	57
Performance Task	Near	0.18	54
Analytic Writing Task	Near	0.16	52
Make-an-Argument	Near	-0.12	40
Critique-an-Argument	Near	0.45	66

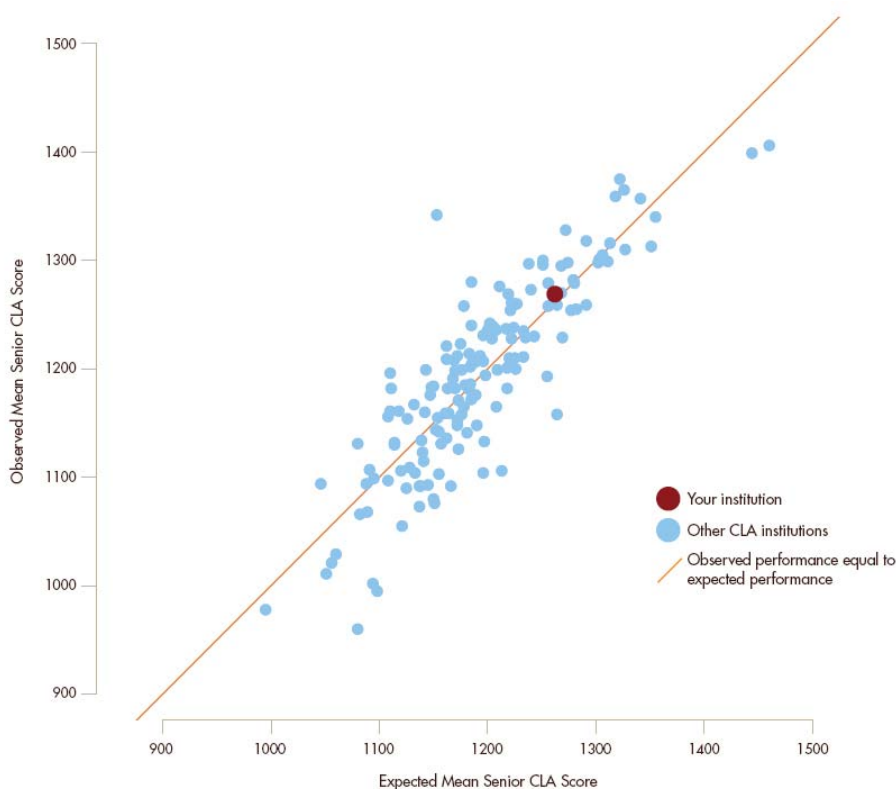# More Information

More information regarding this study can be found at the Institutional Research website found at http://www.und.edu/dept/datacol/index.html or by contacting Michael Braget at 777-2494 or Carmen Williams at 777-2456.

Also, the CLA is part of a larger group, the Council for Aid to Education (CAE). According to their website, CAE "is a national nonprofit organization based in New York City. Initially established in 1952 to advance corporate support of education and to conduct policy research on higher education, today CAE is also focused on improving quality and access in higher education." More information about CAE can be found on their website located at http://www.cae.org/content/about.htm.

The Collegiate Learning Assessment

Figure 1 plots the observed mean CLA score against the expected mean CLA score of the participating schools of the CLA study. The diagonal line represents an observed performance equal to expected performance. Therefore, plots above the line represent schools who performed better than expected while plots below represent schools that performed lower than expected. UND, represented by the darker colored circle, is slightly above the expected performance set by the value-added model. This also shows a visual of why performance levels in Table 4 are reported at "near" expectation.

Figure 1. Observed CLA Scores vs. Expected CLA Scores

Institutional UND Research

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