

CU-Boulder and the Collegiate Learning Assessment (CLA) Highlights with 2010-11 Results

August 2011, CU-Boulder Planning, Budget, and Analysis

Both highlights and the full report from CLA are posted at
<http://www.colorado.edu/pba/perfmeas/>

Background

CU-Boulder has selected the Collegiate Learning Assessment (CLA, <http://www.collegiatelearningassessment.org/>) for accountability testing and publication in the College Portrait of the Voluntary System of Accountability.

The CLA, which was developed with the support of the nonprofit Council for Aid to Education (CAE), measures holistically the integrated abilities to think critically, reason analytically, solve problems, and communicate clearly. Its method involves measuring these skills through demanding simulated real-world tasks, using open-ended prompts requiring written responses, rather than through multiple-choice testing. The test has two parts: A Performance task, and an Analytic Writing task. An individual student is assigned to do one or the other, but not both. Testing time is 90 minutes.

As an example of the Performance task, test-takers might be assigned something like the following (taken from CAE's website at http://www.cae.org/content/pro_collegiate_sample_measures.htm):

You are the assistant to 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. You are provided with the following documentation:

- 1: Newspaper articles about the accident
- 2: Federal Accident Report on in-flight breakups in single engine planes
- 3: Pat's e-mail to you & Sally's e-mail to Pat
- 4: Charts on SwiftAir's performance characteristics
- 5: Amateur Pilot article comparing SwiftAir 235 to similar planes
- 6: Pictures and description of SwiftAir Models 180 and 235

Please prepare a memo that addresses several questions, including what data support or refute the claim that the type of wing on the SwiftAir 235 leads to more in-flight breakups, what other factors might have contributed to the accident and should be taken into account, and your overall recommendation about whether or not DynaTech should purchase the plane.

The Analytic Writing task is divided into two parts, one which requires making an argument concerning a prompted issue, the other critiquing an argument on a separate issue. Students may take any position they wish as long as they make relevant arguments using sound logic and clear communication.

All tests are scored by CLA. The Performance task uses human scorers, while the Analytic Writing task uses automated scoring, with human scorers used in cases where the automatic scoring program does not work, either because the writing is off-topic or is extremely long or short.

2010-11 at CU-Boulder

Per CLA requirements, 103 new freshmen were tested in October 2010, and 106 seniors were tested in March 2011. In both cases, the students tested were the first to respond to invitations sent to all 5,160 freshmen and all 3,954 seniors who had entered UCB as freshmen and who were registered for enough credits to make them eligible to graduate at the end of the term.

Students were offered a \$50 cash reward for participating. CLA reported results in July 2011. These will be included in the Voluntary System of Accountability College Portrait for CU-Boulder (<http://www.collegeportraits.org/CO/CU-Boulder>) updated in January 2012. Cost of our 2010-11 participation: \$6,725 direct to CLA, plus \$10,450 in incentive payments to students, plus approximately 320 hours of student time and 75 hours of staff time. Students received, also in July, e-mail from CLA with information on how well they did compared to other CU-Boulder students, and students around the country, who completed the same task.

CLA reports senior performance relative to expectations established by a statistical model that adjusts for seniors' own "Entering Academic Ability" (as measured by SAT/ACT scores earned before college entry) as well as CLA performance of the previous fall's entering freshmen. Performance is thus interpreted as "value added" by the education received at the institution. **Seniors tested in spring 2011 performed almost exactly as expected, according to CLA's value-added statistical model, as illustrated in the graph and tables below. This matched UCB's performance in the 2009-2010 testing.**

Note: This report is on PBA network at L:\ir\outcomes\CLA\CLA_1011_ColoradoBoulder_Highlights.docx.

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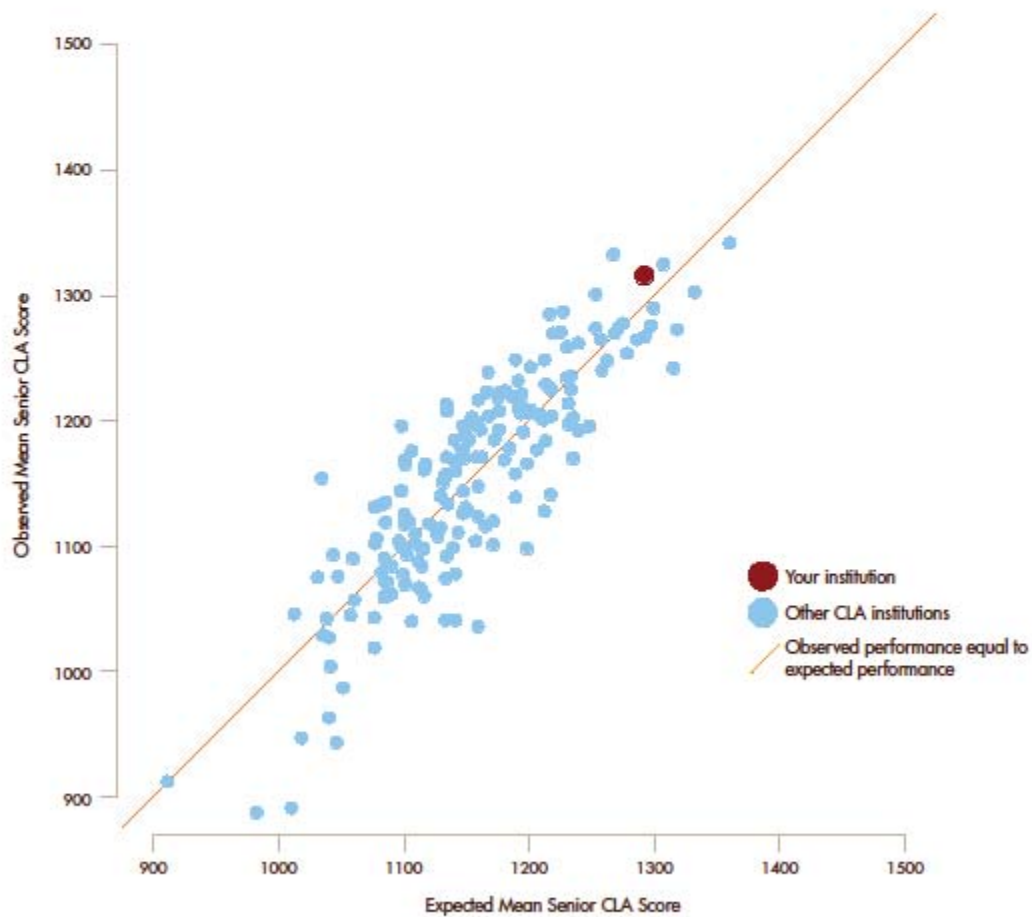
Your Results (continued)

Performance Compared to Other Institutions

Figure 3.5 shows the performance of all four-year colleges and universities, relative to their expected performance as predicted by the value-added model. The vertical distance from the diagonal line indicates the value added by the institution; institutions falling above the diagonal line are those that add more value than expected based on the model. Your institution is highlighted in red. See Appendix G for details on how the CLA total score value-added estimates displayed in this figure were computed.

3.5

Observed CLA Scores vs. Expected CLA Scores



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2010-2011 CLA Institutional Report

Tables summarizing CU-Boulder’s results from 2009-10 are below. For a more complete description see the full report.

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Your Results

3.1

Value-Added and Precision Estimates

	Performance Level	Value-Added Score	Value-Added Percentile Rank	Confidence Interval Lower Bound	Confidence Interval Upper Bound
Total CLA Score	Near	0.54	68	-0.08	1.16
Performance Task	Near	0.45	68	-0.25	1.15
Analytic Writing Task	Near	0.56	70	-0.15	1.27
Make-an-Argument	Near	0.57	70	-0.17	1.31
Critique-an-Argument	Near	0.45	66	-0.3	1.2

3.2

Seniors: Unadjusted Performance

	Number of Seniors	Mean Score	Mean Score Percentile Rank	25th Percentile Score	75th Percentile Score	Standard Deviation
Total CLA Score	106	1316	97	1249	1397	129
Performance Task	55	1318	97	1269	1397	138
Analytic Writing Task	51	1313	97	1246	1412	119
Make-an-Argument	51	1308	97	1220	1402	124
Critique-an-Argument	51	1319	97	1217	1412	153
EAA	106	1255	95	1170	1360	139

3.3

Freshmen: Unadjusted Performance

	Number of Freshmen	Mean Score	Mean Score Percentile Rank	25th Percentile Score	75th Percentile Score	Standard Deviation
Total CLA Score	103	1191	93	1095	1284	140
Performance Task	51	1197	93	1062	1303	173
Analytic Writing Task	52	1186	91	1132	1268	99
Make-an-Argument	52	1193	92	1112	1280	116
Critique-an-Argument	52	1178	90	1120	1287	143
EAA	103	1236	96	1140	1340	134

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