Collegiate Learning Assessment

- Why the CLA?
- Sample performance task
- Testing Administration
- Results
- Considerations for next time

Voluntary System of Accountability (VSA)

- Developed by a group within the Association of American Colleges and Universities
- Voluntary system to enter information regarding the UG student experience – College Portrait
  http://www.collegeportraits.org/

Three popular “value-added” measures of learning outcomes approved for the VSA

- Collegiate Assessment of Academic Proficiency (CAAP) from ACT
- ETS Proficiency Profile (formerly known as the Measure of Academic Proficiency and Progress-MAPP) from Educational Testing Service (ETS)
- Collegiate Learning Assessment (CLA) from the Council for Aid to Education (CAE)
ACT Collegiate Assessment of Academic Proficiency (CAAP)

- For VSA purposes both the Writing Essay & Critical Thinking tests administered
  - 2-week test period scheduled by institution-via paper
  - Minimum of 200 freshmen (test in fall) & 200 seniors (test within 6 months of graduation)
  - Longitudinal study is optional
- 40-minute tests with option of 9 local questions
- Student level data with student learning gains/module - measures of “well above,” “above,” “at,” “below,” or “well below.”

ETS Proficiency Profile

- Two versions
  - Standard - 2 hours, intended to provide information about individual students or groups of students
    - Multiple-choice questions testing critical thinking skills, reading skills, writing skills, mathematic skills
  - Abbreviated - 40 minutes, intended to provide information about groups of 50 or more
    - Each part of test is taken by one-third of the students
- Test scheduled by institution-either paper/online, proctored/non-proctored (for distance students)
- Demographic data, 50 local questions, essay option
- Comparative data by Carnegie class/student level

Collegiate Learning Assessment

- Performance Task or Analytic Writing Task (Make-an-Argument and Critique-an-Argument Task)
  - All open-ended questions
  - Test period scheduled by institution-via online
  - Minimum of 100 freshmen (test in fall) & 100 soon-to-graduate seniors (test in spring)
  - Longitudinal testing is optional
- 75 or 90-minute tests with option of Scholastic Level Exam (SLE) and/or local questions
- Student level data with student learning gains. Value-added scores are determined (well above expected, above expected, expected, below expected, and well below expected)
- Comparison data by institutional type
Sample Performance Task

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

Sample Performance Task

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.

CLA Scoring

- Rubric scoring to determine high quality, medium quality, or low quality response
- 2007-2008 CLA scoring was conducted by trained scorers
- Fall 2008, a combination of automated and human scoring
- Beginning fall 2010, exclusively automated scoring – but some sent for human rating

What Does The CLA Measure?

The CLA measures how students perform on constructed-response tasks that require an integrated skill set of:

- Critical Thinking
- Analytic Reasoning
- Problem Solving
- Written Communications
**UND’s First-year (FY) Test Administration**

- Institutional testing plan/schedule submitted to CLA – coordinated by Assessment Director and OIR
- 10 2-hour sessions offered over four days
- OIR set up CLA screens and exam periods
- First-year students recruited through email invitation in August – 700 random selection
- Slow start, OIR emailed invite to remaining freshmen
- After 129 “sign-ups” started waitlist (30 students)
- Reminder emails sent one week prior and two days prior
- Of the 129 FY invites, 111 showed up

**UND FY Test Administration – day of test**

- At testing, one person from Assessment Committee attended along with an OIR staff member
- Computer lab available only to test takers
- CLA and UND scripts read
- Students took test online
- Students turned in Name/ID/Address sheet in order to process $50 gift

**UND Senior Test Administration**

- Testing plan/scheduled & computer space reserved - coordinated by Assessment Director and OIR
- Seniors recruited through email invitation in January
- More difficult to get seniors to sign up than FY
- Once seniors DID confirm, fewer “no-shows” than FY
- Two reminder emails sent
- 124* senior participants
- And then the unthinkable happened on first testing night...
  the CLA server crashed...

  (*108 were counted in some of the results)

**Results**

- **Freshmen**
  - CLA Student Profile
  - Time on Task
  - CLA takers compared to Non-CLA takers - other surveys
  - End-of-term indicators
- **Seniors**
  - CLA Student Profile
  - Time on Task
  - CLA takers compared to Non-CLA takers - other surveys
- **Overall UND Results**
Freshman – CLA vs. All Entering Freshmen

<table>
<thead>
<tr>
<th></th>
<th>CLA Participants</th>
<th>ALL Entering FYR Freshmen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>111</td>
<td>1,992</td>
</tr>
<tr>
<td>Females</td>
<td>64%</td>
<td>48%</td>
</tr>
<tr>
<td>Full-time</td>
<td>100%</td>
<td>99%</td>
</tr>
<tr>
<td>Sophomore (earned college credit in H.S.)</td>
<td>10%</td>
<td>5%</td>
</tr>
<tr>
<td>Undecided Majors</td>
<td>22%</td>
<td>25%</td>
</tr>
<tr>
<td>Provisional Students</td>
<td>5%</td>
<td>14%</td>
</tr>
<tr>
<td>High School GPA Mean</td>
<td>3.58</td>
<td>3.38</td>
</tr>
<tr>
<td>ACT Composite Mean</td>
<td>25.1</td>
<td>23.3</td>
</tr>
</tbody>
</table>

Freshmen – Time Spent on Performance Task

<table>
<thead>
<tr>
<th>Minutes Spent on Task</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;30</td>
<td>9</td>
</tr>
<tr>
<td>30-39</td>
<td>10</td>
</tr>
<tr>
<td>40-49</td>
<td>16</td>
</tr>
<tr>
<td>50-59</td>
<td>10</td>
</tr>
<tr>
<td>60-69</td>
<td>8</td>
</tr>
<tr>
<td>70+</td>
<td>3</td>
</tr>
</tbody>
</table>

Performance Task Score by Minutes Spent

<table>
<thead>
<tr>
<th>Minutes Spent on Task</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;30</td>
<td>1,105</td>
</tr>
<tr>
<td>30-39</td>
<td>1,165</td>
</tr>
<tr>
<td>40-49</td>
<td>1,229</td>
</tr>
<tr>
<td>50-59</td>
<td>1,157</td>
</tr>
<tr>
<td>60-69</td>
<td>1,254</td>
</tr>
<tr>
<td>70+</td>
<td>1,280</td>
</tr>
</tbody>
</table>

Minutes Spent by Performance Task Score

<table>
<thead>
<tr>
<th>Performance Task Score</th>
<th>Minutes Spent on Task</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;1100</td>
<td>N=14</td>
</tr>
<tr>
<td>1100-1199</td>
<td>N=13</td>
</tr>
<tr>
<td>1200-1299</td>
<td>N=19</td>
</tr>
<tr>
<td>1300+</td>
<td>N=10</td>
</tr>
</tbody>
</table>

N=56  Average Scaled CLA Score=1191  Average Time Spent=44.8 Minutes
Freshmen – Time Spent on Performance Task

Performance Task Score by Minutes Spent

![Graph showing the relationship between time spent and performance task score.](image)

- N=56
- Average Scaled CLA Score=1191
- Average Time Spent=44.8 Minutes

r = 0.393

---

Freshmen – Time Spent on Writing Task

Writing Task Score by Minutes Spent

![Bar chart showing the distribution of minutes spent on writing task.](image)

- N=55
- Average Scaled CLA Score=1248
- Average Time Spent=45.3 Minutes

---

Freshmen – Time Spent on Writing Task

Minutes Spent by Writing Task Score

![Bar chart showing the distribution of minutes spent on writing task.](image)

- N=55
- Average Scaled CLA Score=1248
- Average Time Spent=45.3 Minutes

---

Freshmen – Time Spent on Writing Task

Minutes Spent by Writing Task Score

![Bar chart showing the distribution of minutes spent on writing task.](image)

- N=55
- Average Scaled CLA Score=1248
- Average Time Spent=45.3 Minutes
**Freshmen – Time Spent on Writing Task**

- **Writing Task Score by Minutes Spent**
- **r = 0.483**
- **N=55** Average Scaled CLA Score=1248  Average Time Spent=45.3 Minutes

---

**Freshman – CLA vs. Non-CLA**

**CLA vs. Non-CLA on Key Variables in the College Student Inventory (CSI)**

<table>
<thead>
<tr>
<th>College Student Inventory Variable</th>
<th>Mean CSI Score of CLA Students (N=88)</th>
<th>Mean CSI Score of Non-CLA (N=1321)</th>
<th>Mean Difference*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verbal Confidence</td>
<td>56.6</td>
<td>47.2</td>
<td>9.4</td>
</tr>
<tr>
<td>Receptivity to Social Enrichment</td>
<td>55.1</td>
<td>46.7</td>
<td>8.4</td>
</tr>
<tr>
<td>Desire to Finish College</td>
<td>50.3</td>
<td>42.4</td>
<td>7.9</td>
</tr>
<tr>
<td>Sense of Financial Security</td>
<td>48.0</td>
<td>55.5</td>
<td>-7.5</td>
</tr>
<tr>
<td>Dropout Proneness</td>
<td>34.3</td>
<td>45.3</td>
<td>-11.0</td>
</tr>
<tr>
<td>Predicted Academic Difficulty</td>
<td>28.5</td>
<td>38.5</td>
<td>-10.0</td>
</tr>
</tbody>
</table>

*Desired direction of scale; *Significant at p<.05

---

**Freshman – CLA vs. Non-CLA**

**CSI Recommendations: CLA vs. Non-CLA**

**Top Five**

**CLA**
1. Get help meeting new friends
2. Get info about clubs and social organizations
3. Get help selecting academic program
4. Get help obtaining scholarship
5. Discuss qualifications for occupations

**Non-CLA**
1. Get help selecting academic program
2. Get help with exam skills
3. Discuss qualifications for occupations
4. Get help meeting new friends
5. Get info about clubs and social organizations

---

**Freshman – CLA vs. Non-CLA**

**CSI Recommendations: CLA vs. Non-CLA**

Top Five Largest Differences

1. Get help obtaining scholarship (0.594)
2. Get help finding p/t job (0.592)
3. Get help with writing skills (-0.586)
4. Get help with study habits (-0.535)
5. Get help with exam skills (-0.491)
Freshman – CLA vs. Non-CLA

Student Satisfaction Inventory (SSI): CLA vs. Non-CLA
Top Five Areas of Importance

<table>
<thead>
<tr>
<th>CLA</th>
<th>Non-CLA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Nearly all of the faculty are</td>
<td>1. I am able to achieve my educational</td>
</tr>
<tr>
<td>knowledgeable in their field (6.67)</td>
<td>goals at this institution (6.56)</td>
</tr>
<tr>
<td>2. I am able to achieve my educational</td>
<td>2. My academic advisor is</td>
</tr>
<tr>
<td>goals at this institution (6.56)</td>
<td>knowledgeable about requirements in my major (6.52)</td>
</tr>
<tr>
<td>3. There is a good variety of courses</td>
<td>3. I am able to register for classes I</td>
</tr>
<tr>
<td>provided on this campus (6.64)</td>
<td>need with few conflicts (6.52)</td>
</tr>
<tr>
<td>4. My academic advisor is</td>
<td>4. Nearly all of the faculty are</td>
</tr>
<tr>
<td>knowledgeable about requirements in my</td>
<td>knowledgeable in their field (6.50)</td>
</tr>
<tr>
<td>major (6.62)</td>
<td>5. The quality of instruction I receive</td>
</tr>
<tr>
<td>5. I am able to register for classes I</td>
<td>in most of my classes is excellent (6.49)</td>
</tr>
<tr>
<td>need with few conflicts (6.62)</td>
<td></td>
</tr>
</tbody>
</table>

CLA

Top Five Areas of Satisfaction

<table>
<thead>
<tr>
<th>CLA</th>
<th>Non-CLA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Nearly all of the faculty are</td>
<td>1. A variety of wellness programs are available on campus (6.44)</td>
</tr>
<tr>
<td>knowledgeable in their field (6.67)</td>
<td>2. Gender equity and equal opportunity exist in the classroom (6.28)</td>
</tr>
<tr>
<td>2. I am able to achieve my educational</td>
<td>3. There is a good variety of courses provided on this campus (6.15)</td>
</tr>
<tr>
<td>goals at this institution (6.56)</td>
<td>4. It is an enjoyable experience to be a student on this campus (6.13)</td>
</tr>
<tr>
<td>3. My academic advisor is</td>
<td>5. Satisfaction that campus demonstrates commitment to students with disabilities (6.08)</td>
</tr>
<tr>
<td>knowledgeable about requirements in my</td>
<td></td>
</tr>
<tr>
<td>major (6.62)</td>
<td></td>
</tr>
<tr>
<td>4. I am able to register for classes I</td>
<td></td>
</tr>
<tr>
<td>need with few conflicts (6.62)</td>
<td></td>
</tr>
<tr>
<td>5. The quality of instruction I receive</td>
<td></td>
</tr>
<tr>
<td>in most of my classes is excellent (6.49)</td>
<td></td>
</tr>
</tbody>
</table>

Non-CLA

End-of-term Indicators

<table>
<thead>
<tr>
<th></th>
<th>CLA Participants</th>
<th>ALL Entering FYR Freshmen</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Semester GPA</td>
<td>3.25</td>
<td>2.77</td>
</tr>
<tr>
<td>1st Year Retention</td>
<td>90%</td>
<td>79%</td>
</tr>
</tbody>
</table>

Seniors – CLA vs. Non-CLA

<table>
<thead>
<tr>
<th></th>
<th>CLA Participants</th>
<th>Other Graduating Seniors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean ACT Score</td>
<td>24.03</td>
<td>23.60</td>
</tr>
<tr>
<td>End of Spring 2010 UND GPA</td>
<td>3.40</td>
<td>3.28</td>
</tr>
</tbody>
</table>
Seniors – Time Spent on Performance Task

- N=61
- Average Scaled CLA Score=1220
- Average Time Spent=52.2 Minutes

---

Performance Task Score by Minutes Spent

- Score: 1000, 1050, 1100, 1150, 1200, 1250, 1300
- Minutes Spent: <30, 30-39, 40-49, 50-59, 60-69, 70+

---

Minutes Spent by Performance Task Score

- Minutes Spent: 47.9, 53.1, 53.9, 54.0
- Performance Task Score: 1,146, 1,118, 1,268, 1,236, 1,225, 1,228

---

Performance Task Score by Minutes Spent

- Score: <1100, 1100-1199, 1200-1299, 1300+
- Minutes Spent: 0, 10, 20, 30, 40, 50, 60, 70, 80

---

r = 0.146
### Seniors – Time Spent on Writing Task

- **N** = 61
- **Average Scaled CLA Score** = 1302
- **Average Time Spent** = 54.1 Minutes

<table>
<thead>
<tr>
<th>Minutes</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;30</td>
<td>3</td>
</tr>
<tr>
<td>30-39</td>
<td>6</td>
</tr>
<tr>
<td>40-49</td>
<td>16</td>
</tr>
<tr>
<td>50-59</td>
<td>10</td>
</tr>
<tr>
<td>60-69</td>
<td>18</td>
</tr>
<tr>
<td>70+</td>
<td>8</td>
</tr>
</tbody>
</table>

### Writing Task Score by Minutes Spent

- **N** = 61
- **Average Scaled CLA Score** = 1302
- **Average Time Spent** = 54.1 Minutes

<table>
<thead>
<tr>
<th>Score Range</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 30</td>
<td>N=3</td>
</tr>
<tr>
<td>30-39</td>
<td>N=6</td>
</tr>
<tr>
<td>40-49</td>
<td>N=16</td>
</tr>
<tr>
<td>50-59</td>
<td>N=10</td>
</tr>
<tr>
<td>60-69</td>
<td>N=18</td>
</tr>
<tr>
<td>70+</td>
<td>N=8</td>
</tr>
</tbody>
</table>

### Minutes Spent by Writing Task Score

- **N** = 61
- **Average Scaled CLA Score** = 1302
- **Average Time Spent** = 54.1 Minutes

<table>
<thead>
<tr>
<th>Score Range</th>
<th>Minutes Spent</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;1100</td>
<td>N=7</td>
</tr>
<tr>
<td>1100-1199</td>
<td>N=6</td>
</tr>
<tr>
<td>1200-1299</td>
<td>N=11</td>
</tr>
<tr>
<td>1300+</td>
<td>N=37</td>
</tr>
</tbody>
</table>

### Writing Task Score by Minutes Spent

- **N** = 61
- **Average Scaled CLA Score** = 1302
- **Average Time Spent** = 54.1 Minutes

- **r** = 0.461
Seniors – CLA vs. Non-CLA

Student Satisfaction Inventory (SSI): CLA vs. Non-CLA
Top Five Areas of Importance

CLA
1. I am able to register for classes I need with few conflicts (6.80)
2. The instruction in my major field is excellent (6.78)
3. My academic advisor is knowledgeable about requirements in my major (6.70)
4. I am able to achieve my educational goals at this institution (6.69)
5. Nearly all of the faculty are knowledgeable in their field (6.64)

Non-CLA
1. I am able to achieve my educational goals at this institution (6.64)
2. The instruction in my major field is excellent (6.63)
3. The content of the courses within my major is valuable (6.62)
4. Nearly all of the faculty are knowledgeable in their field (6.58)
5. My academic advisor is knowledgeable about requirements in my major (6.58)

CLA Overall Results

Demographics

<table>
<thead>
<tr>
<th>Gender</th>
<th>Freshmen</th>
<th>Seniors</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>39</td>
<td>48</td>
<td>87</td>
</tr>
<tr>
<td>Female</td>
<td>72</td>
<td>59</td>
<td>131</td>
</tr>
<tr>
<td>Decline to State</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Field of Study

| Sciences & 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/NA     | 39 | 10 | 49 |

CLA Overall Results - Freshmen

Unadjusted Freshman Performance

<table>
<thead>
<tr>
<th>Total CLA Score</th>
<th>N</th>
<th>Mean Score</th>
<th>Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance Task</td>
<td>56</td>
<td>1191</td>
<td>90</td>
</tr>
<tr>
<td>Analytic Writing Task</td>
<td>55</td>
<td>1248</td>
<td>91</td>
</tr>
<tr>
<td>Make-an-Argument</td>
<td>55</td>
<td>1255</td>
<td>90</td>
</tr>
<tr>
<td>Critique-an-Argument</td>
<td>55</td>
<td>1240</td>
<td>90</td>
</tr>
<tr>
<td>Entering Academic Ability</td>
<td>111</td>
<td>1150</td>
<td>81</td>
</tr>
</tbody>
</table>
CLA Overall Results - Seniors

<table>
<thead>
<tr>
<th>Unadjusted Senior Performance</th>
<th>N</th>
<th>Mean Score</th>
<th>Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total CLA Score</td>
<td>108</td>
<td>1269</td>
<td>79</td>
</tr>
<tr>
<td>Performance Task</td>
<td>54</td>
<td>1222</td>
<td>80</td>
</tr>
<tr>
<td>Analytic Writing Task</td>
<td>54</td>
<td>1316</td>
<td>82</td>
</tr>
<tr>
<td>Make-an-Argument</td>
<td>54</td>
<td>1289</td>
<td>78</td>
</tr>
<tr>
<td>Critique-an-Argument</td>
<td>54</td>
<td>1342</td>
<td>84</td>
</tr>
<tr>
<td>Entering Academic Ability</td>
<td>108</td>
<td>1124</td>
<td>72</td>
</tr>
</tbody>
</table>

Model predicts the average CLA score of seniors and compares it to the actual test scores of seniors.

The school’s value–added score indicates the degree to which the senior CLA score meets, exceeds, or falls below the expected score.

Scores higher than expected are interpreted as “value added” in that the learning ability of seniors has progressed further than expected based on the CLA model. Lower scores interpreted as falling short of predicted added learning ability.

CLA Overall Results

<table>
<thead>
<tr>
<th>Value-Added / Precision Estimates</th>
<th>Performance Level</th>
<th>Value-Added Score</th>
<th>Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total CLA Score</td>
<td>Near</td>
<td>0.17</td>
<td>57</td>
</tr>
<tr>
<td>Performance Task</td>
<td>Near</td>
<td>0.18</td>
<td>54</td>
</tr>
<tr>
<td>Analytic Writing Task</td>
<td>Near</td>
<td>0.16</td>
<td>52</td>
</tr>
<tr>
<td>Make-an-Argument</td>
<td>Near</td>
<td>-0.12</td>
<td>40</td>
</tr>
<tr>
<td>Critique-an-Argument</td>
<td>Near</td>
<td>0.45</td>
<td>66</td>
</tr>
</tbody>
</table>

Observed CLA Scores vs. Expected CLA Scores of participating schools.

Diagonal line represents an observed performance equal to expected performance. Red circle represents UND. Plots above represent schools who performed better than expected, plots below those who performed lower than expected.
Wrap up

- Lessons Learned
  - Next time administering the CLA
    - Time on test matters!
    - Use the nine optional questions
    - Possibly go into classrooms to get a more random sampling – e.g. FYR classes, capstone classes
    - Investigate other surveys that these students might participate in (e.g. BCSSE, NSSE)

Collegiate Learning Assessment
University of North Dakota

For a copy of this presentation – go to UND>Office of Institutional Research and select Reports>Presentations and Papers or type in below link

//und.edu/research/institutional-research/_files/docs/presentations/survey-findings-2011-cla.pdf

CONTACT INFORMATION:
Carmen Williams – carmen.williams@email.und.edu
Michael Braget - michael.braget@gmail.com
OFFICE OF INSTITUTIONAL RESEARCH
Collegiate Learning Assessment

- Why the CLA?
- Sample performance task
- Testing Administration
- Results
- Considerations for next time
Voluntary System of Accountability (VSA)

- Developed by a group within the Association of American Colleges and Universities
- Voluntary system to enter information regarding the UG student experience – College Portrait

http://www.collegeportraits.org/
Three popular “value-added” measures of learning outcomes approved for the VSA

- Collegiate Assessment of Academic Proficiency (CAAP) from ACT
- ETS Proficiency Profile (formerly known as the Measure of Academic Proficiency and Progress-MAPP) from Educational Testing Service (ETS)
- Collegiate Learning Assessment (CLA) from the Council for Aid to Education (CAE)
ACT Collegiate Assessment of Academic Proficiency (CAAP)

- For VSA purposes both the Writing Essay & Critical Thinking tests administered
  - 2-week test period scheduled by institution-via paper
  - Minimum of 200 freshmen (test in fall) & 200 seniors (test within 6 months of graduation)
  - Longitudinal study is optional
- 40-minute tests with option of 9 local questions
- Student level data with student learning gains/module - measures of “well above,” “above,” “at,” “below,” or “well below.”
ETS Proficiency Profile

- **Two versions**
  - **Standard** - 2 hours, intended to provide information about individual students or groups of students
    - Multiple-choice questions testing critical thinking skills, reading skills, writing skills, mathematic skills
  - **Abbreviated** - 40 minutes, intended to provide information about groups of 50 or more
    - Each part of test is taken by one-third of the students
- Test scheduled by institution-either paper/online, proctored/non-proctored (for distance students)
- Demographic data, 50 local questions, essay option
- Comparative data by Carnegie class/student level
Collegiate Learning Assessment

- Performance Task or Analytic Writing Task (Make-an-Argument and Critique-an-Argument Task)
  - All open-ended questions
  - Test period scheduled by institution-via online
  - Minimum of 100 freshmen (test in fall) & 100 soon-to-graduate seniors (test in spring)
  - Longitudinal testing is optional

- 75 or 90-minute tests with option of Scholastic Level Exam (SLE) and/or local questions

- Student level data with student learning gains. Value-added scores are determined (well above expected, above expected, expected, below expected, and well below expected)

- Comparison data by institutional type
Response Instructions

The left side of the screen is your Workspace. Here you will see the specific questions you are to answer and an area in which to write your response. The sizes of the response boxes are not fixed, so your answers to each question can be as long as you wish.

The right side of the screen is your Document Library. Use the drop-down menu to select the document you want to see. You will need to use all of the documents to complete the entire task, but only some for each question. Some documents do not fit entirely on the right side of the screen. If the document is taller than the screen, use the scroll bar on the right side of the screen to move the document up and down. You can also change the size of the left and right sides of the screen by clicking and dragging the gray bar that divides the screen.

You may scan through the questions before beginning. However, if you leave a task without completing the questions you will not be allowed to return to the task.

When you are preparing your answer in the response box, the BACKSPACE button on your keyboard will work to delete text.

Above the response box, you will find the COPY, CUT, and PASTE buttons. These buttons will allow you to copy text and paste it, either within the same response box, or from one response box to another. COPY will leave the desired text, whereas CUT will delete the desired text until it is pasted.

You may practice typing in the response box below.
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
Sample Performance Task

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.
CLA Scoring

- Rubric scoring to determine *high quality, medium quality, or low quality response*
- 2007-2008 CLA scoring was conducted by trained scorers
- Fall 2008, a combination of automated and human scoring
- Beginning fall 2010, exclusively automated scoring – but some sent for human rating
What Does The CLA Measure?

The CLA measures how students perform on constructed-response tasks that require an integrated skill set of:

- Critical Thinking
- Analytic Reasoning
- Problem Solving
- Written Communications
UND’s First-year (FY) Test Administration

- Institutional testing plan/schedule submitted to CLA – coordinated by Assessment Director and OIR
- 10 2-hour sessions offered over four days
- OIR set up CLA screens and exam periods
- First-year students recruited through email invitation in August – 700 random selection
- Slow start, OIR emailed invite to remaining freshmen
- After 129 “sign-ups” started waitlist (30 students)
- Reminder emails sent one week prior and two days prior
- Of the 129 FY invites, 111 showed up
UNDFY Test Administration – day of test

- At testing, one person from Assessment Committee attended along with an OIR staff member
- Computer lab available only to test takers
- CLA and UND scripts read
- Students took test online
- Students turned in Name/ID/Address sheet in order to process $50 gift
UND Senior Test Administration

- Testing plan/scheduled & computer space reserved - coordinated by Assessment Director and OIR
- Seniors recruited through email invitation in January
- More difficult to get seniors to sign up than FY
- Once seniors DID confirm, fewer “no-shows” than FY
- Two reminder emails sent
- 124* senior participants
- And then the unthinkable happened on first testing night...
  the CLA server crashed...
  (*108 were counted in some of the results)
Results

- **Freshmen**
  - CLA Student Profile
  - Time on Task
  - CLA takers compared to Non-CLA takers - other surveys
  - End-of-term indicators

- **Seniors**
  - CLA Student Profile
  - Time on Task
  - CLA takers compared to Non-CLA takers - other surveys

- **Overall UND Results**
<table>
<thead>
<tr>
<th></th>
<th>CLA Participants</th>
<th>ALL Entering FYR Freshmen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>111</td>
<td>1,992</td>
</tr>
<tr>
<td>Females</td>
<td>64%</td>
<td>48%</td>
</tr>
<tr>
<td>Full-time</td>
<td>100%</td>
<td>99%</td>
</tr>
<tr>
<td>Sophomore (earned college credit in H.S.)</td>
<td>10%</td>
<td>5%</td>
</tr>
<tr>
<td>Undecided Majors</td>
<td>22%</td>
<td>25%</td>
</tr>
<tr>
<td>Provisional Students</td>
<td>5%</td>
<td>14%</td>
</tr>
<tr>
<td>High School GPA Mean</td>
<td>3.58</td>
<td>3.38</td>
</tr>
<tr>
<td>ACT Composite Mean</td>
<td>25.1</td>
<td>23.3</td>
</tr>
</tbody>
</table>
Freshmen – Time Spent on Performance Task

N=56  Average Scaled CLA Score=1191  Average Time Spent=44.8 Minutes

<table>
<thead>
<tr>
<th>Minutes Spent on Task</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;30</td>
<td>9</td>
</tr>
<tr>
<td>30-39</td>
<td>10</td>
</tr>
<tr>
<td>40-49</td>
<td>16</td>
</tr>
<tr>
<td>50-59</td>
<td>10</td>
</tr>
<tr>
<td>60-69</td>
<td>8</td>
</tr>
<tr>
<td>70+</td>
<td>3</td>
</tr>
</tbody>
</table>
Freshmen – Time Spent on Performance Task

Performance Task Score by Minutes Spent

- < 30 minutes: 1,105 (N=9)
- 30-39 minutes: 1,165 (N=10)
- 40-49 minutes: 1,229 (N=16)
- 50-59 minutes: 1,157 (N=10)
- 60-69 minutes: 1,254 (N=8)
- 70+ minutes: 1,280 (N=3)

N=56  Average Scaled CLA Score=1191  Average Time Spent=44.8 Minutes
Freshmen – Time Spent on Performance Task

Minutes Spent by Performance Task Score

N=56  Average Scaled CLA Score=1191  Average Time Spent=44.8 Minutes
Freshmen – Time Spent on Performance Task

Performance Task Score by Minutes Spent

N=56   Average Scaled CLA Score=1191   Average Time Spent=44.8 Minutes
Freshmen – Time Spent on Writing Task

N=55  Average Scaled CLA Score=1248  Average Time Spent=45.3 Minutes

- <30 minutes: 4
- 30-39 minutes: 16
- 40-49 minutes: 19
- 50-59 minutes: 8
- 60-69 minutes: 5
- 70+ minutes: 3

Minutes Spent on Task

Frequency
Freshmen – Time Spent on Writing Task

Writing Task Score by Minutes Spent

N=55  Average Scaled CLA Score=1248  Average Time Spent=45.3 Minutes
Freshmen – Time Spent on Writing Task

Minutes Spent by Writing Task Score

- **<1100**: 37.3 minutes, N=7
- **1100-1199**: 42.4 minutes, N=13
- **1200-1299**: 43.1 minutes, N=17
- **1300+**: 52.6 minutes, N=18

N=55  Average Scaled CLA Score=1248  Average Time Spent=45.3 Minutes
Freshmen – Time Spent on Writing Task

Writing Task Score by Minutes Spent

N=55   Average Scaled CLA Score=1248   Average Time Spent=45.3 Minutes

r = 0.483
## Freshman – CLA vs. Non-CLA

### CLA vs. Non-CLA on Key Variables in the College Student Inventory (CSI)

<table>
<thead>
<tr>
<th>College Student Inventory Variable</th>
<th>Mean CSI Score of CLA Students (N=88)</th>
<th>Mean CSI Score of Non-CLA (N=1321)</th>
<th>Mean Difference*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verbal Confidence</td>
<td>56.6</td>
<td>47.2</td>
<td>9.4</td>
</tr>
<tr>
<td>Receptivity to Social Enrichment</td>
<td>55.1</td>
<td>46.7</td>
<td>8.4</td>
</tr>
<tr>
<td>Desire to Finish College</td>
<td>50.3</td>
<td>42.4</td>
<td>7.9</td>
</tr>
<tr>
<td>Sense of Financial Security</td>
<td>48.0</td>
<td>55.5</td>
<td>-7.5</td>
</tr>
<tr>
<td>Dropout Proneness</td>
<td>34.3</td>
<td>45.3</td>
<td>-11.0</td>
</tr>
<tr>
<td>Predicted Academic Difficulty</td>
<td>28.5</td>
<td>38.5</td>
<td>-10.0</td>
</tr>
</tbody>
</table>

↑ Desired direction of scale;  *Significant at p<.05
# CSI Recommendations: CLA vs. Non-CLA Top Five

<table>
<thead>
<tr>
<th>CLA</th>
<th>Non-CLA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Get help meeting new friends</td>
<td>1. Get help selecting academic program</td>
</tr>
<tr>
<td>2. Get info about clubs and social organizations</td>
<td>2. Get help with exam skills</td>
</tr>
<tr>
<td>3. Get help selecting academic program</td>
<td>3. Discuss qualifications for occupations</td>
</tr>
<tr>
<td>5. Discuss qualifications for occupations</td>
<td>5. Get info about clubs and social organizations</td>
</tr>
</tbody>
</table>
CSI Recommendations: CLA vs. Non-CLA

Top Five Largest Differences

1. Get help obtaining scholarship (0.594)
2. Get help finding p/t job (0.592)
3. Get help with writing skills (-0.586)
4. Get help with study habits (-0.535)
5. Get help with exam skills (-0.491)
Freshman – CLA vs. Non-CLA

Student Satisfaction Inventory (SSI): CLA vs. Non-CLA
Top Five Areas of Importance

CLA
1. Nearly all of the faculty are knowledgeable in their field (6.67)
2. I am able to achieve my educational goals at this institution (6.65)
3. There is a good variety of courses provided on this campus (6.64)
4. My academic advisor is knowledgeable about requirements in my major (6.62)
5. I am able to register for classes I need with few conflicts (6.62)

Non-CLA
1. I am able to achieve my educational goals at this institution (6.56)
2. My academic advisor is knowledgeable about requirements in my major (6.52)
3. I am able to register for classes I need with few conflicts (6.52)
4. Nearly all of the faculty are knowledgeable in their field (6.50)
5. The quality of instruction I receive in most of my classes is excellent (6.49)
### Student Satisfaction Inventory (SSI): CLA vs. Non-CLA

#### Top Five Areas of Satisfaction

<table>
<thead>
<tr>
<th>CLA</th>
<th>Non-CLA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. A variety of wellness programs are available on campus (6.44)</td>
<td>1. A variety of wellness programs are available on campus (6.11)</td>
</tr>
<tr>
<td>2. Gender equity and equal opportunity exist in the classroom (6.28)</td>
<td>2. Gender equity and equal opportunity exist in the classroom (6.00)</td>
</tr>
<tr>
<td>3. There is a good variety of courses provided on this campus (6.15)</td>
<td>3. There is a good variety of courses provided on this campus (5.99)</td>
</tr>
<tr>
<td>4. <em>It is an enjoyable experience to be a student on this campus</em> (6.13)</td>
<td>4. There are opportunities to study abroad that are available through UND (5.93, CLA rank 7)</td>
</tr>
<tr>
<td>5. <em>Satisfaction that campus demonstrates commitment to students with disabilities</em> (6.08)</td>
<td>5. This institution has a good reputation within the community (5.93, CLA rank 14)</td>
</tr>
</tbody>
</table>
### Freshman – CLA vs. Non-CLA

#### End-of-term Indicators

<table>
<thead>
<tr>
<th></th>
<th>CLA Participants</th>
<th>ALL Entering FYR Freshmen</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Semester GPA</td>
<td>3.25</td>
<td>2.77</td>
</tr>
<tr>
<td>1st Year Retention</td>
<td>90%</td>
<td>79%</td>
</tr>
<tr>
<td></td>
<td>CLA Participants</td>
<td>Other Graduating Seniors</td>
</tr>
<tr>
<td>------------------------</td>
<td>------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>Mean ACT Score</td>
<td>24.03</td>
<td>23.60</td>
</tr>
<tr>
<td>End of Spring 2010 UND GPA</td>
<td>3.40</td>
<td>3.28</td>
</tr>
</tbody>
</table>
Seniors – Time Spent on Performance Task

N=61  Average Scaled CLA Score=1220  Average Time Spent=52.2 Minutes

Minutes
<30  7
30-39  5
40-49  13
50-59  19
60-69  5
70+  12
Seniors – Time Spent on Performance Task

Performance Task Score by Minutes Spent

N=61  Average Scaled CLA Score=1220  Average Time Spent=52.2 Minutes

- < 30: N=7, Score=1,146
- 30-39: N=5, Score=1,118
- 40-49: N=13, Score=1,268
- 50-59: N=19, Score=1,236
- 60-69: N=5, Score=1,225
- 70+: N=12, Score=1,228
Seniors – Time Spent on Performance Task

Minutes Spent by Performance Task Score

- <1100: N=13, 47.9 minutes
- 1100-1199: N=12, 53.1 minutes
- 1200-1299: N=6, 53.9 minutes
- 1300+: N=18, 54.0 minutes

N=61  Average Scaled CLA Score=1220  Average Time Spent=52.2 Minutes
Seniors – Time Spent on Performance Task

Performance Task Score by Minutes Spent

N=61  Average Scaled CLA Score=1220  Average Time Spent=52.2 Minutes

r = 0.146
Seniors – Time Spent on Writing Task

N=61  Average Scaled CLA Score=1302  Average Time Spent=54.1 Minutes

Frequency

Minutes

<30  3
30-39  6
40-49  16
50-59  10
60-69  18
70+    8
Seniors – Time Spent on Writing Task

Average Scaled CLA Score = 1302
Average Time Spent = 54.1 Minutes

Writing Task Score by Minutes Spent

- < 30 minutes: N=3, Score = 1019
- 30-39 minutes: N=6, Score = 1325
- 40-49 minutes: N=16, Score = 1266
- 50-59 minutes: N=10, Score = 1275
- 60-69 minutes: N=18, Score = 1368
- 70+ minutes: N=8, Score = 1350
Seniors – Time Spent on Writing Task

Minutes Spent by Writing Task Score

N=61  Average Scaled CLA Score=1302  Average Time Spent=54.1 Minutes
Seniors – Time Spent on Writing Task

N = 61
Average Scaled CLA Score = 1302
Average Time Spent = 54.1 Minutes

Writing Task Score by Minutes Spent

$r = 0.461$
Seniors – CLA vs. Non-CLA

Student Satisfaction Inventory (SSI): CLA vs. Non-CLA
Top Five Areas of Importance

**CLA**

1. *I am able to register for classes I need with few conflicts* (6.80)
2. The instruction in my major field is excellent (6.78)
3. My academic advisor is knowledgeable about requirements in my major (6.70)
4. *I am able to achieve my educational goals at this institution* (6.69)
5. Nearly all of the faculty are knowledgeable in their field (6.64)

**Non-CLA**

1. I am able to achieve my educational goals at this institution (6.64)
2. The instruction in my major field is excellent (6.63)
3. *The content of the courses within my major is valuable* (6.62)
4. Nearly all of the faculty are knowledgeable in their field (6.58)
5. My academic advisor is knowledgeable about requirements in my major (6.58)
Seniors – CLA vs. Non-CLA

Student Satisfaction Inventory (SSI): CLA vs. Non-CLA
Top Five Areas of Satisfaction

<table>
<thead>
<tr>
<th>Non-CLA</th>
<th>CLA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I am able to achieve my educational goals at this institution (6.05)</td>
<td>1. A variety of wellness programs are available on campus (6.30)</td>
</tr>
<tr>
<td>2. There are opportunities to study abroad that are available at UND (5.88, CLA rank 9)</td>
<td>2. I am able to achieve my educational goals at this institution (6.09)</td>
</tr>
<tr>
<td>3. On the whole, the campus is well-maintained (5.86)</td>
<td>3. There is a good variety of courses provided on this campus (6.02)</td>
</tr>
<tr>
<td>4. Gender equity and equal opportunity exist in the classroom (5.84, CLA rank 11)</td>
<td>4. I feel comfortable with the atmosphere of this campus (5.93)</td>
</tr>
<tr>
<td>5. On the whole, the campus is well-maintained (5.89)</td>
<td>5. On the whole, the campus is well-maintained (5.89)</td>
</tr>
<tr>
<td>6. The institution has a good reputation within the community (5.85, CLA rank 14)</td>
<td>6. The institution has a good reputation within the community (5.85, CLA rank 14)</td>
</tr>
</tbody>
</table>
# CLA Overall Results

<table>
<thead>
<tr>
<th>Demographics</th>
<th>Freshmen</th>
<th>Seniors</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>39</td>
<td>48</td>
<td>87</td>
</tr>
<tr>
<td>Female</td>
<td>72</td>
<td>59</td>
<td>131</td>
</tr>
<tr>
<td>Decline to State</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Field of Study</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sciences &amp; Engineering</td>
<td>16</td>
<td>27</td>
<td>43</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>7</td>
<td>22</td>
<td>29</td>
</tr>
<tr>
<td>Humanities &amp; Languages</td>
<td>4</td>
<td>9</td>
<td>13</td>
</tr>
<tr>
<td>Business</td>
<td>12</td>
<td>23</td>
<td>35</td>
</tr>
<tr>
<td>Helping/Services</td>
<td>33</td>
<td>17</td>
<td>50</td>
</tr>
<tr>
<td>Undecided/Other/NA</td>
<td>39</td>
<td>10</td>
<td>49</td>
</tr>
</tbody>
</table>
## CLA Overall Results - Freshmen

<table>
<thead>
<tr>
<th>Unadjusted Freshman Performance</th>
<th>N</th>
<th>Mean Score</th>
<th>Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total CLA Score</td>
<td>111</td>
<td>1219</td>
<td>92</td>
</tr>
<tr>
<td>Performance Task</td>
<td>56</td>
<td>1191</td>
<td>90</td>
</tr>
<tr>
<td>Analytic Writing Task</td>
<td>55</td>
<td>1248</td>
<td>91</td>
</tr>
<tr>
<td>Make-an-Argument</td>
<td>55</td>
<td>1255</td>
<td>90</td>
</tr>
<tr>
<td>Critique-an-Argument</td>
<td>55</td>
<td>1240</td>
<td>90</td>
</tr>
<tr>
<td>Entering Academic Ability</td>
<td>111</td>
<td>1150</td>
<td>81</td>
</tr>
</tbody>
</table>
## CLA Overall Results - Seniors

<table>
<thead>
<tr>
<th>Unadjusted Senior Performance</th>
<th>N</th>
<th>Mean Score</th>
<th>Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total CLA Score</strong></td>
<td>108</td>
<td>1269</td>
<td>79</td>
</tr>
<tr>
<td>Performance Task</td>
<td>54</td>
<td>1222</td>
<td>80</td>
</tr>
<tr>
<td>Analytic Writing Task</td>
<td>54</td>
<td>1316</td>
<td>82</td>
</tr>
<tr>
<td>Make-an-Argument</td>
<td>54</td>
<td>1289</td>
<td>78</td>
</tr>
<tr>
<td>Critique-an-Argument</td>
<td>54</td>
<td>1342</td>
<td>84</td>
</tr>
<tr>
<td>Entering Academic Ability</td>
<td>108</td>
<td>1124</td>
<td>72</td>
</tr>
</tbody>
</table>
Model predicts the average CLA score of seniors and compares it to the actual test scores of seniors.

The school’s value-added score indicates the degree to which the senior CLA score meets, exceeds, or falls below the expected score.

Scores higher than expected are interpreted as “value added” in that the learning ability of seniors has progressed further than expected based on the CLA model. Lower scores interpreted as falling short of predicted added learning ability.
## CLA Overall Results

<table>
<thead>
<tr>
<th>Value-Added / Precision Estimates</th>
<th>Performance Level</th>
<th>Value-Added Score</th>
<th>Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total CLA Score</td>
<td>Near</td>
<td>0.17</td>
<td>57</td>
</tr>
<tr>
<td>Performance Task</td>
<td>Near</td>
<td>0.18</td>
<td>54</td>
</tr>
<tr>
<td>Analytic Writing Task</td>
<td>Near</td>
<td>0.16</td>
<td>52</td>
</tr>
<tr>
<td>Make-an-Argument</td>
<td>Near</td>
<td>-0.12</td>
<td>40</td>
</tr>
<tr>
<td>Critique-an-Argument</td>
<td>Near</td>
<td>0.45</td>
<td>66</td>
</tr>
</tbody>
</table>
CLA Overall Results

Observed CLA Scores vs. Expected CLA Scores of participating schools.

Diagonal line represents an observed performance equal to expected performance. Red circle represents UND. Plots above represent schools who performed better than expected, plots below those who performed lower than expected.
Wrap up

- Lessons Learned

- Next time administering the CLA
  - Time on test matters!
  - Use the nine optional questions
  - Possibly go into classrooms to get a more random sampling – e.g. FYR classes, capstone classes
  - Investigate other surveys that these students might participate in (e.g. BCSSE, NSSE)
Collegiate Learning Assessment

University of North Dakota

For a copy of this presentation – go to **UND>Office of Institutional Research** and select **Reports>Presentations and Papers** or type in below link

//und.edu/research/institutional-research/_files/docs/presentations/survey-findings-2011-cla.pdf

**CONTACT INFORMATION:**

Carmen Williams – carmen.williams@email.und.edu
Michael Braget - michael.braget@gmail.com

OFFICE OF INSTITUTIONAL RESEARCH