The Collegiate Learning Assessment (CLA)

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The CLA

- Measures critical thinking, analytic reasoning, problem solving, written communication skills
- Focuses on the institution not the student
- And asks two questions
  - How much value added growth in these skills occurs from the point students enter the institution to when they graduate, controlling for student SAT/ACT scores?
  - How much difference in value added growth and absolute results is there comparing institutions?

Student Learning Outcome Measures Needed

- Higher education policy: three interrelated components

  - Access

  - Cost, productivity

  - Quality of undergraduate education

- Without credible measures of student learning outcomes, success in first and second is problematic.

Assumptions Behind the CLA

QUALITY MATTERS

- Measuring quality –assessment of learning

- Assessment enhances learning/teaching

- Comparative assessment data across institutions –benchmarking and signal

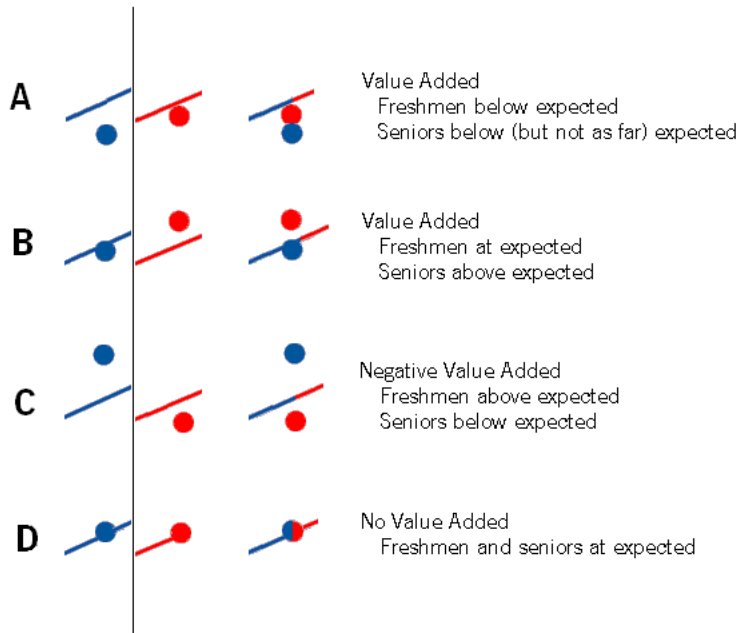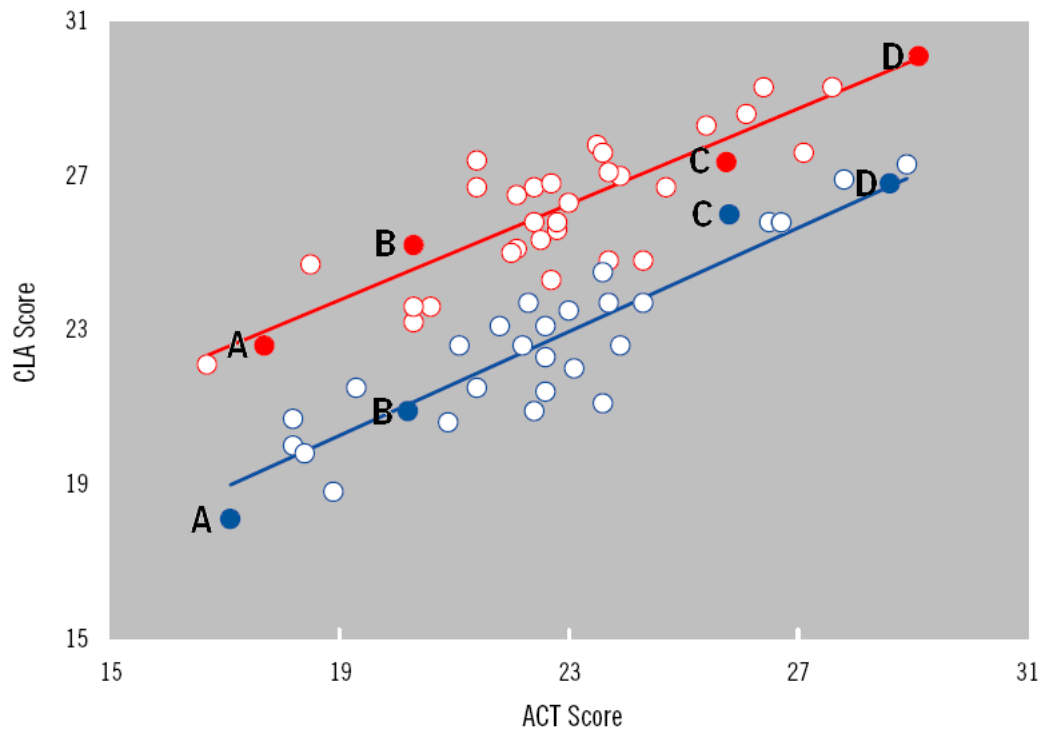- Value Added—measuring institution contribution

Credible Measures

- Not just indirect proxies such as SAT scores, per capita endowment, graduation rates, or GRE/LSAT scores

- Not only measures of student satisfaction or engagement

- The focus? Evidence of real growth in cognitive learning
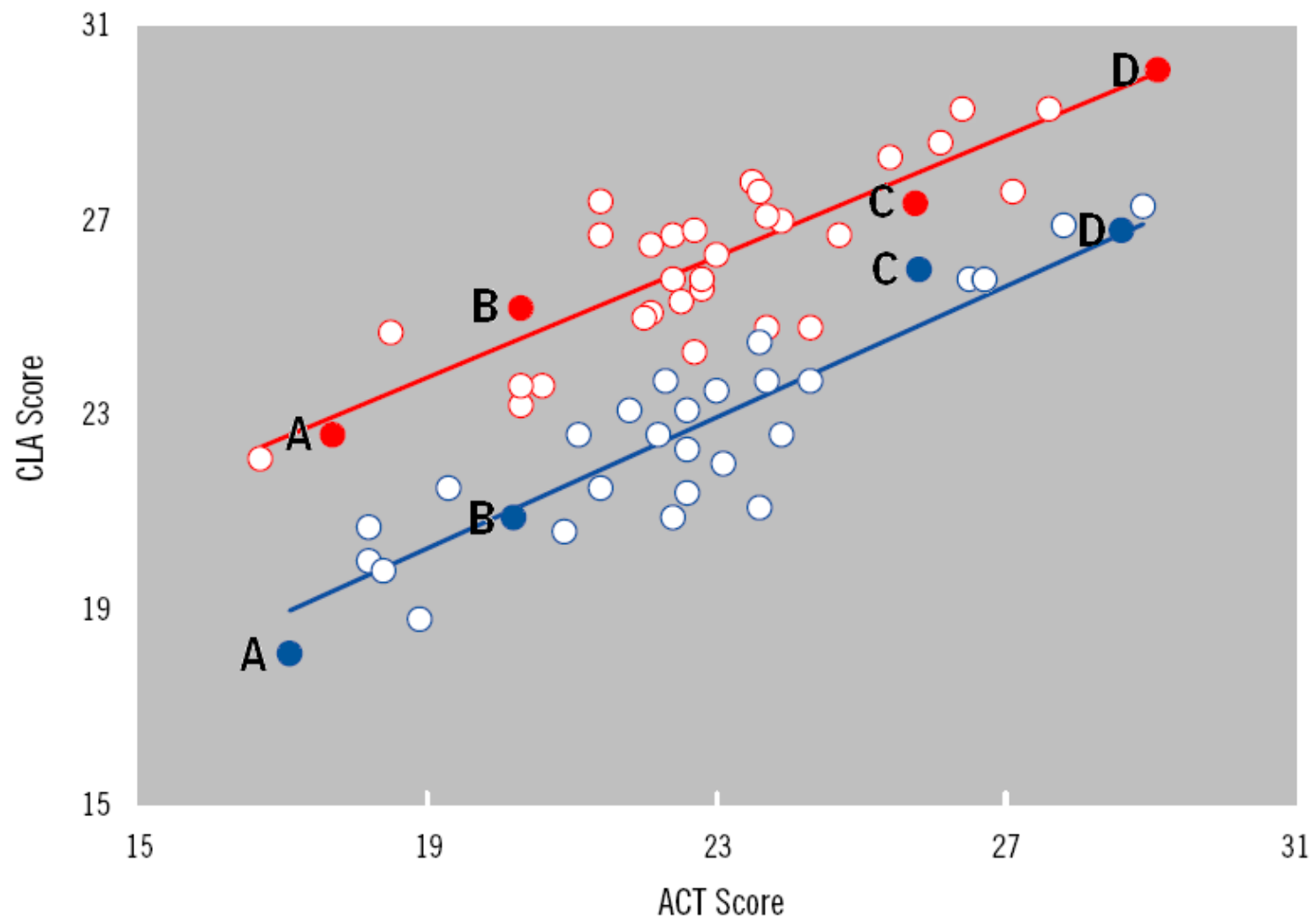
Institutions Do Matter

- Over 1.5 standard deviation growth within colleges and universities

- Some institutions do better, occasionally much better than expected

- Institutions alter the substantial selectivity effects seen for entering students

CLA Score (y-axis)
ACT Score (x-axis)

A — Value Added
Freshmen below expected
Seniors below (but not as far) expected

B — Value Added
Freshmen at expected
Seniors above expected

C — Negative Value Added
Freshmen above expected
Seniors below expected

D — No Value Added
Freshmen and seniors at expected

Barriers to Development of Cognitive Measures (1)

- History of faculty control of curriculum and assessment
  - No history of rigorous cross-unit comparisons
  - Faculty suspicious of outside interference, critical of existing tests
- Tradition of higher education institutions' autonomy to define and assert meaning of quality in unique way
  - Precludes comparisons across institutions

Barriers (2)

- No core curriculum—unlike K-12 or professional schools
- No national focus on quality—unlike National Assessment of Education Progress (NAEP)
- The performance measures focused on by states are problematic

Barriers (3)

- Pursuit of prestige not quality of undergraduate education drives higher education.

- Prestige defined by SAT scores, endowment, research ranking, sports teams rankings, enrollment demand.

- Current prestige level determines focus of administrators—student learning not a focus.

Barriers (4)

- Critics contend credible student learning measures impossible to develop.

- No one set of instruments can measure all of undergraduate education.

- We should be content with status quo---faculty assigning grades and devising particular assessment tools.

The Case (1)

- Technological advances now allow progress in developing more complex measures that can be brought to scale.

- Moreover, the inability to measure <u>all</u> facets of undergraduate education does not mean certain critical aspects cannot be measured.

The Case (2): Without Comparative-Based Measures, how can:

- Any institution claim superior undergraduate quality?

- Parents and teachers, and students prepare for college work and select their college?

- Accrediting associations do an even stronger job?

- Faculty have incentives to focus on teaching?

The Case (3): The Whole Should be More Than the Sum of its Parts

- The institution, not departments, promises to raise the quality of critical thinking and analytic reasoning of its students, skills prized by employers, policymakers, parents, faculty themselves.

- General education movement in higher education exemplifies this.

- Measures that focus on institutional contribution to these skills should join measures at department and course levels.

A Focus on These Skills Would Provide the Basis for:

- Comparison---an important signaling tool

- Creation of additional incentives for faculty

- A renewed emphasis on common, core curriculum objectives

CLA Tasks

Performance tasks (90 minutes)

- Present realistic problems, complete with document library and cut across the arts and sciences

- Require students to apply what they have learned to solve problems and make recommendations

- Have face validity---relevant academics agree graduating college students should be able to perform these tasks.

- Engage the students (based on focus group reports)

Performance Tasks

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?

CLA Tasks

Analytic writing tasks (45 and 30 minutes)

- Measure 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.

  - Make-an-Argument (45 minutes): support or reject a position on some issue

  - Critique-an-Argument (30 minutes): evaluate the validity of an argument made by someone else.

Analytic Writing Tasks

A "Make-an-Argument" Analytic Writing Task prompt typically presents an opinion on some 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. For example, they might be asked to explain why they agree or disagree with the following:

> *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.*

A "Critique-an-Argument" Analytic Writing Task asks students to critique an argument by discussing how well reasoned they find it to be (rather than simply agreeing or disagreeing with the position presented). For example, they might be asked to evaluate the following 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.*

A Step Forward

- Until recently CLA type tasks were impossible to administer to large numbers of students. The Internet has changed this situation.

- The CLA is administered, scored, analyzed, and results are reported back through the Internet---more cheaply and with fewer errors.

Comparison of CLA Tasks To Multiple Choice Tests
(1)

- **MULTIPLE CHOICE TESTS CHEAPER, EASIER TO SCORE, AND ESPECIALLY USEFUL FOR KNOWLEDGE, COMPREHENSION, AND RECOGNITION PERFORMANCE**

- **CLA FOCUSES ON THE *PERFORMANCE* OF CRITICAL THINKING, ANALYTICAL REASONING AND WRITING**

- **CONSTRUCTED RESPONSE ON TASKS ONE MIGHT FIND IN REAL-LIFE SITUATIONS**

Comparison of CLA Tasks and Multiple Choice Tests (2)

- Identifying issues and information most relevant to problem at hand
- Marshalling and organizing information
- Making a persuasive argument
- Presenting a clear, cogent, and coherent rationale

CLA versus Multiple Choice (3)

- Answering carefully delineated parts of complex problems is not the same as answering the problem itself.

- The CLA requires active engagement on the part of the student requiring definition of the problem, establishment of connections in the information supplied, and priorities in causal factors.

Testing Report

- **Over 40,000 students will be tested at 140 schools by June, 2006**

- **Cross-sectional and longitudinal**

- **Participating 4-year schools represent nine percent of market and closely align with national distribution across Carnegie Classifications**

CLA Participation to Date (post feasibility study)

Testing Cycle	Schools	Students
2004-2005	58	8009
2005-2006	123	18416
Total	140	26425

Repeat Participants   41 (of 58)
Associate's Colleges   9

4-year Institutions by Carnegie Classification National Counts and CLA Participants

Carnegie Classification - Detailed	Nation		CLA		CLA vs Nation	Market Share
	N	%	N	%		
Doctoral/Research Universities—Extensive	151	11%	13	10%	-1	9%
Doctoral/Research Universities—Intensive	110	8%	14	11%	3	13%
Master's Colleges and Universities I	496	35%	50	38%	3	10%
Master's Colleges and Universities II	115	8%	4	3%	-5	3%
Baccalaureate Colleges—Liberal Arts	228	16%	26	20%	4	11%
Baccalaureate Colleges—General	321	23%	24	18%	-4	7%
	1421		131			9%
Carnegie Classification - Reduced						
Doctoral/Research Universities	261	18%	27	21%	2	10%
Master's Colleges and Universities	611	43%	54	41%	-2	9%
Baccalaureate Colleges	549	39%	50	38%	0	9%
	1421		131			9%

Plans

- Growth in numbers of participating institutions, including community colleges
- Creation of state and national standards for minimum proficiency levels, means, and ranges
- Focus on best practice response to CLA results

Uses for Accountability Purposes

- Focus on improvement

- Compare states on changes in value added growth

- Explore development of state and national standards and when and how to implement them

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