Teach, Learn, Assess

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Themes

- Rationale for Assessment
- The Strategy for Assessment
- The Case for Performance Assessment

Rationale for Assessment

- Emerging consensus that postsecondary education, the venue for human capital development, is not up to the job of dealing with a common pool problem (CPP) combines with the prospect for rising costs/declining revenues and increased pressure from for profits.

- CPPs are goods with distortion problems that may turn into permanent crises.

Thesis One

- Education policy, focused on the premise that human capital development is the principal resource a nation has, will come to be regarded as the most important obligation of the State

Thesis Two

- The presence of a common pool problem (CPP)---access deficits, low retention/graduation rates and quality problems in postsecondary education combines with rising costs, declining resources, new for profit actors adding up to unprecedented challenges to postsecondary education.

Implication One

- A greater need for evidence-based decision making to improve the quality of student learning and reduce costs

- Benchmarking the quality of student learning is the critical metric against which to evaluate changes in curriculum, re allocation of funding to departments directed at improving student learning or reducing costs.

Implication Two

- There will be increasing demands for transparency, restructuring, and accountability including demands for institutions to benchmark the growth and level of student learning attainment of graduating seniors from local, state, and national authorities, private sector leaders, students and their parents, boards of trustees and central administrators.

Implication Three

- Because higher education institutions possess a high level of legitimacy and relative autonomy and feature a decentralized system of accountability anchored by department-based governance, assessment instruments and accountability systems must be developed that are viewed as authentic and appropriate by faculty.

External/Internal Linkage

- The challenges to traditional higher education will come from external sources but the way, the method of adaptation will be developed by faculty and administrators in the higher education community.

The Strategy for Assessment

- Address misaligned incentives
  - Department-based governance reflects dominance of research metric for evaluation of faculty. Little or no incentives for focusing on improvement of teaching and learning.
  - New incentive systems need to be developed and tested that encourage faculty to focus on teaching.

Recognize the Faculty Role is Central

- The threshold question is the assessment instrument's relevance to the faculty in the classroom. Faculty typically decide what and how to teach and how to assess.

- The instrument must be known to be reliable and valid but this should only be a necessary not sufficient condition for adoption.   It must be seen as authentic by faculty and of direct use in the classroom.

Eliminate the Seven Red Herrings

- Since we cannot measure all of education, it is impossible to measure any part of it.
- Comparison between institutions is not possible or, in any case, warranted
- What is important is what goes on in the classroom between teachers and students
- All standardized tests are bad or not needed

Eliminate the Seven Red Herrings Continued

- One size fits all measures to compare institutions are inappropriate

- Content is what is important in undergraduate education

- If colleges engage in systematic assessment of student learning outcomes, the results will be used by authorities to control and punish institutions

All Hands On Deck

- Formative campus-based assessment
- Portfolios, AAC&U
- Student self reports, NSSE
- National standardized tests
  - Academic Profiles
  - CAAP
  - CLA

All Hands On Deck (2)

- Open Education Initiative (OEI)
  - Creates a team of content specialists, cognitive scientists, education technologists, assessment specialists to create improved courses in STEM fields (Carnegie Mellon project)

IN Development Phase

- Open Education Resource (OER) movement
  - Intellectual property placed on Websites for free access by instructors including
  - Curriculum materials, text materials in PDF form, courses, and disclosed assessment instruments
  - Goal is to create a web-based infrastructure for teaching, learning and assessment

In Research Phase

- Use of performance assessment approach to benchmark new common core standards (the new college readiness standards) for math and English

In Design Only

- The New College of Education built upon
  - Pedagogy
  - Cognitive science
  - Measurement science
  - Education technology
  - Education policy

The Case for Performance Assessment

- Performance assessment appears to be better aligned with the needs of the Knowledge Economy and recent theories of learning that emphasis the importance of applying what one knows to new situations.

- PAs are unique in that they can be used as standardized tests but faculty also find them of direct use in the classroom.

Performance Assessment as Part of Education Reform

- A shift from the lecture format to a student-centered approach to learning
- A change in emphasis from a focus on content in curriculum and textbooks to case and problem based materials that ask students to apply what they know to new situations
- A change in assessment from multiple choice to open-ended essays

An Example of a PA: The Collegiate Learning Assessment (CLA)

- Measures critical thinking, analytic reasoning, problem solving, quantitative reasoning, and 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 <u>and</u> absolute results is there across institutions?

CLA Education: To Advance the Formative Use of PAs

- Offers Performance Task Academies to instruct faculty,
  - How to develop their own tasks and
  - How to teach the types of problem solving skills employed in the CLA PAs.
  - New goal is to link PAs to curriculum reform working with college-based faculty tasks on Internet sites and get CLA tasks on Internet sites for faculty use.

Sample Courses Developed At Colleges

- Performance is Reality---Developing a Performance Task (PT) in Legal Studies
- Using CLA in the Classroom Performance Tasks for Assessment in a Quantitative Reasoning Course
- A Cognitive Psychology PT: A Referendum on Cell Phone Use While Driving
- A CLA-based biology course: development of a protocol for breast cancer treatment

Conclusion: Teach, Learn, Assess

- The size of the problem, student learning, is even more important than most recognize because human capital is the only resource that matters.

- A useful start has been made but much more work to be done. Significant investments in the assessment enterprise will be needed.

Appendix

Examine A Performance Task

http://starttest.com/7.0.0.1/programs/clacross/Practice%20Test%20Page.htm

New Protocol: An Individual, Student-Based CLA Test

- A reliable and valid individual-based protocol will provide students and admissions officers with information about individual students' strengths and weaknesses.

- Graduating students to receive a certified report of results which they could choose to use for job applications and other purposes

Frequently Asked Questions

- Why not focus on student majors or portfolios?

- What evidence is there that the CLA is reliable and valid?

- Is motivation a large problem in the current CLA protocol?

- Are there interaction effects between the CLA performance tasks and academic majors?