Approaches to Measurement: Assessing and Improving Student Learning and Educational Quality

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NSSE, IU Center for Postsecondary Research

**Measuring the Value of a Postsecondary Education HECQO
May 19-20, 2011 Toronto**

Current context: US Higher Education, student learning and success

- **Press to increase graduation rates**
- **Greater accountability for student success**
- **Calls for institutions to demonstrate student learning outcomes**
- **Transparency of cost, outcomes**
- **Increased demands by employers for 21st century knowledge and skills**

Lumina Foundation's Big Goal

GOAL 2025

"Colleges... do so little to measure what students learn between freshman and senior years. So doubt lurks: how much does a college education – the actual teaching and learning that happens on campus – really matter?"

David Leonhardt, NYTimes, Sept 27, 2009

Higher Education Assessment & Accountability 2011

- Greater emphasis on student learning outcomes and evidence that student performance measures up

- Demands for comparative measures

- Assessment "technology" has made strides, but is insufficient to document SLOs most institutions claim

- Increased calls for transparency

- Acceptance that we simply need to do better regarding undergraduate education

What's Happening on Campus?

- **More assessment activities**
- **Emphasis on clearer statements of student learning outcomes**
- **Willingness to improve student learning**
  - **reexamine practice and adopt new methods**
  - **appreciation that experimentation to improve learning can be rewarding**
- **More emphasis on engaged learning practices: learning communities, service-learning, internships, senior capstones, and undergraduate research**
- **Little transparency, even less documented improvement** (Ewell, 2008; Maki, 2004; Trends in Learning Outcomes, General Education, and Assessment, AAC&U, 2009)

National Institute for Learning Outcomes Assessment
Making Learning Outcomes Usable & Transparent

➢ **Far too little is known about assessment practices on campuses**

➢ **NILOA's mission: document student learning outcomes assessment work, identify & disseminate best practices, and support institutions in their assessment efforts**

➢ ***www.learningoutcomesassessment.org***

Advanced Organizer: What Have We Learned?

- Establishing Student Learning Outcomes
- Differences in Perspective
  - Market vs. Academic Accountability
  - Assessment: Accountability vs. Improvement
- What institutions are doing
  - Institution vs. program level
  - Measures used
- What is currently important in measurement? What are the challenges?

Perspectives on Learning Outcomes

National Institute for Learning Outcomes Assessment
Making Learning Outcomes Usable & Transparent

- **Institution wide Outcomes**
  - AAC&U Provost Survey: **78%** of institutions had common sets of student learning outcomes
  - NILOA Provost Survey: **77%** of institutions had common sets of student learning outcomes
  - NSSE Student Survey: **70%** believed their institution had a common set of learning goals
- **Program level Outcomes**
  - NILOA Program level Survey: **80%** of programs had established intended student learning outcomes

Marketplace vs. Academic View of Accountability

	Marketplace Perspective	
Purpose of Education	Product	
Emphasis for Accountability	Student Achievement & Institutional Performance	
Approach	Comparative and improvement oriented within institution	
	Competitive among institutions	
Uses of results	To evaluate, rank	

Two Paradigms of Assessment

	Assessment for Accountability	
Strategic dimensions		
Purpose	Summative (judgment)	
Stance	External	
Predominant ethos	Compliance	
Application choices		
Instrumentation	Standardized	
Nature of evidence	Quantitative	
Reference points	Comparative or fixed standard	
Communication of results	Public communication	
Uses of results	Reporting	

# Influence of Marketplace and Accountability Perspectives

✓ Accountability climate, interest in comparability & rankings drives focus on institution-level summaries

✓ Such a focus…

   ✓ ignores that the variation in terms of student learning outcomes is **within institutions**, not between

   ✓ limits the conversation about quality and improvement to the "tip of the iceberg"
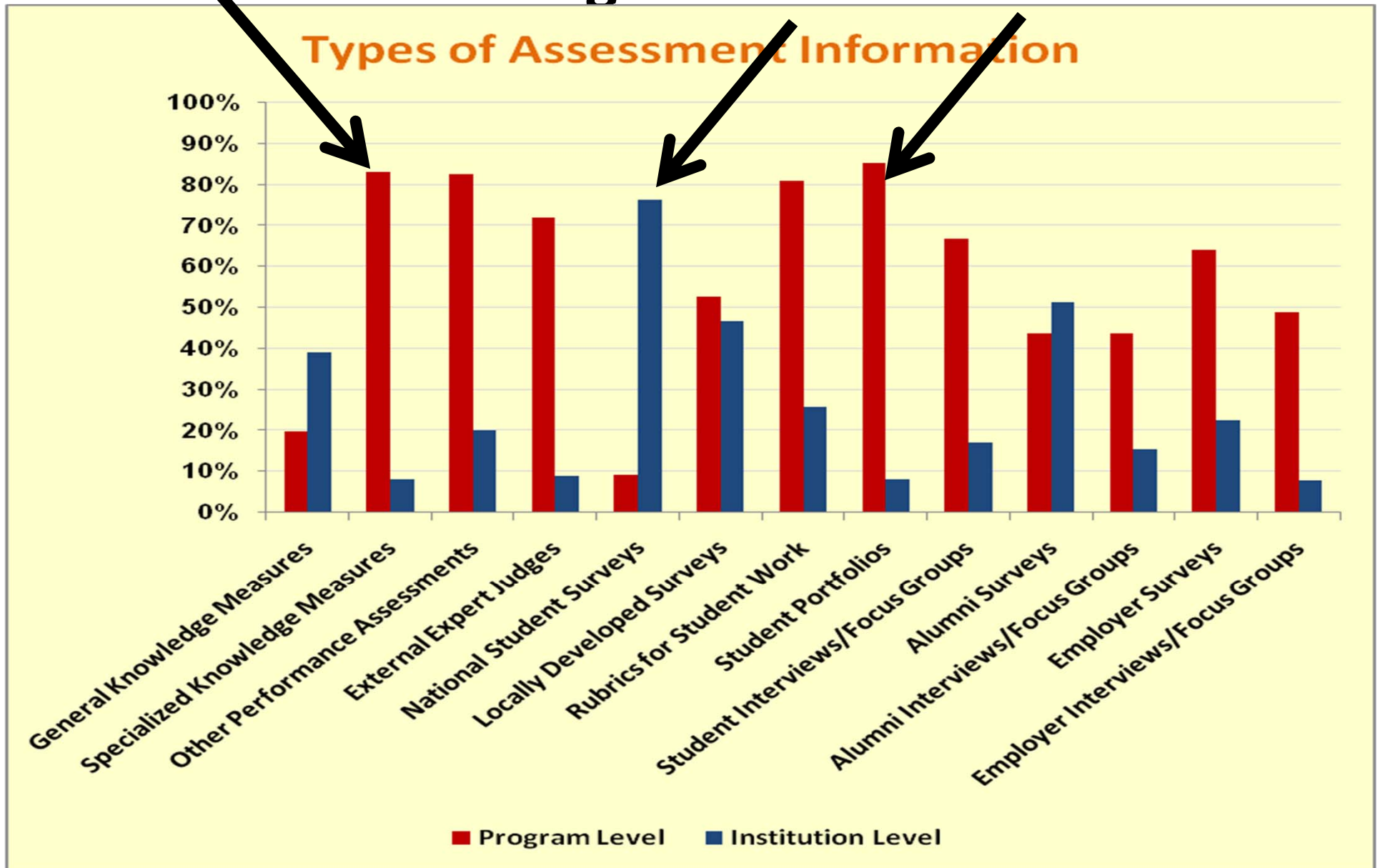
NILOA Finding: Assessments Being Used

Institution-Level Assessments of Learning Outcomes for All Institutions
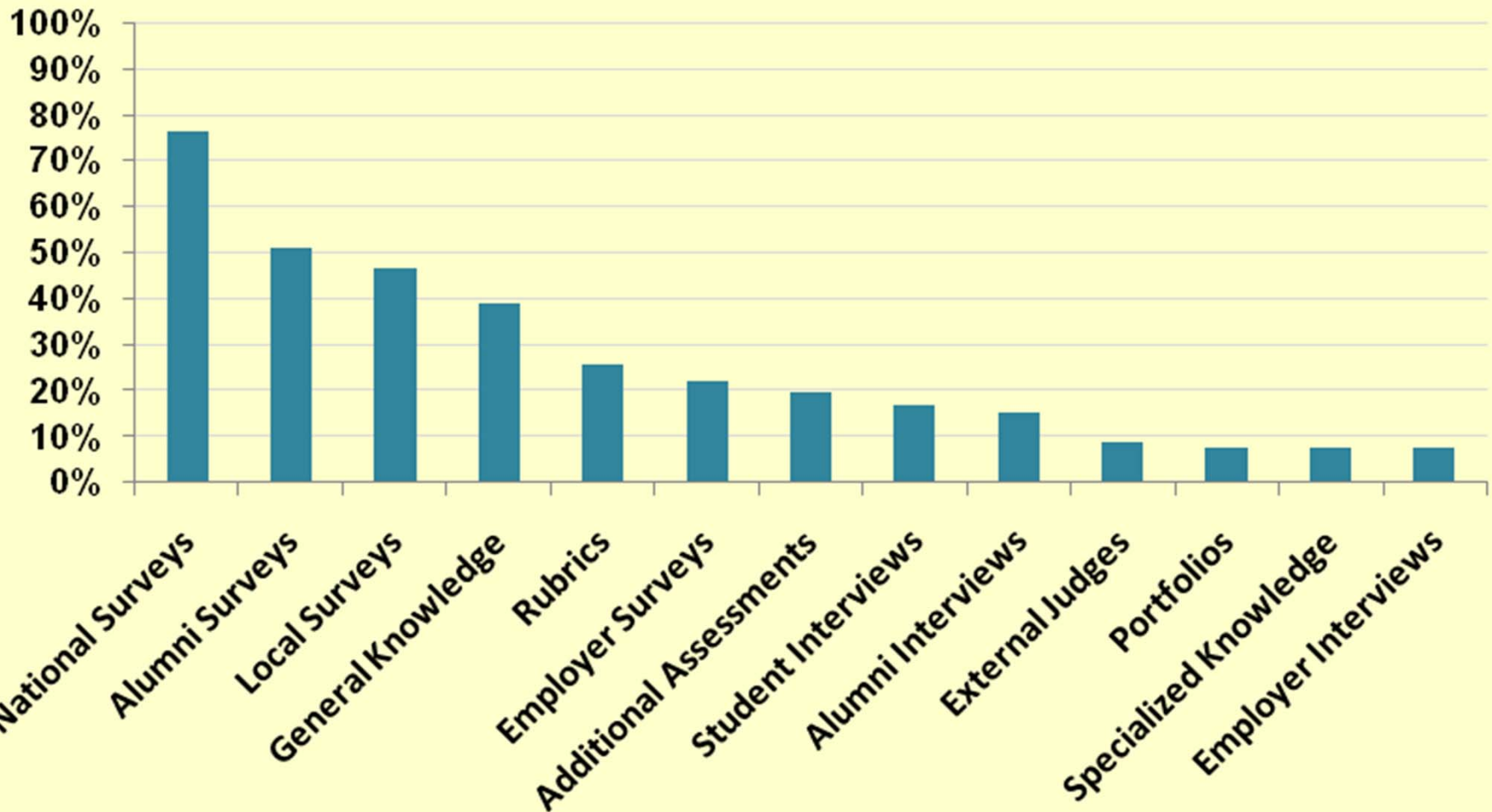
NILOA Finding: Variety at Institution & Program Level

Types of Assessment Information

Legend: ■ Program Level ■ Institution Level

Evidence of College Graduates Skills/Knowledge

| ■ **Very effective** | ■ **Fairly effective** |

Supervised internship/community-based project

69%   83%

Senior project (e.g., thesis, project)

46%   79%

Essay tests

35%   60%

Electronic portfolio & faculty assessments

33%   56%

Multiple-choice tests

7%   32%

A A C & U *Association of American Colleges and Universities*

National Institute for Learning Outcomes Assessment
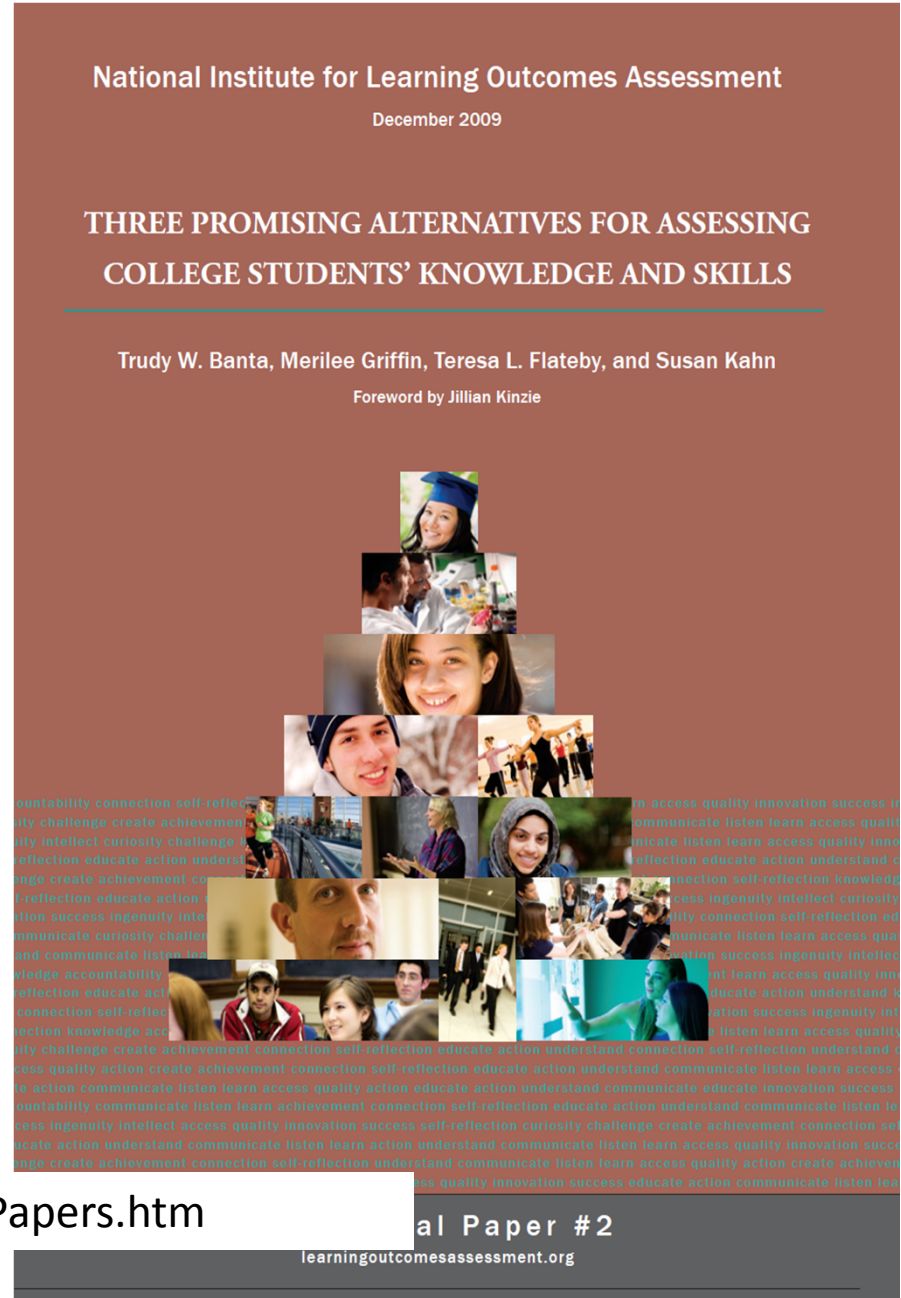
Making Learning Outcomes Usable & Transparent

Occasional Paper #2

Three Promising Alternatives for Assessing College Students' Knowledge and Skills

Banta, Griffin, Flateby & Kahn

Many faculty members prefer what are called "authentic" approaches that document student performance during or at the end of a course or program of study.

www.learningoutcomeassessment.org/OccasionalPapers.htm

National Institute for Learning Outcomes Assessment

December 2009

THREE PROMISING ALTERNATIVES FOR ASSESSING COLLEGE STUDENTS' KNOWLEDGE AND SKILLS

Trudy W. Banta, Merilee Griffin, Teresa L. Flateby, and Susan Kahn

Foreword by Jillian Kinzie

al Paper #2

learningoutcomesassessment.org

AAC&Us VALUE project – 12 Rubrics
Contribute results & feedback to database

Evaluators are encouraged to assign a **zero** to any performance that doesn't meet level one performance.

	4	3	2	1
Connections to experience *Connects relevant experience & academic knowledge*	Shows evidence of combining fields of study and one's own perspective on classroom content as well as life situations to illuminate and deepen one's analysis, synthesis, or interpretation(s).	Demonstrates an understanding of the influence of fields of study with one's own experience outside of the classroom.	Begins to appropriately associate one's own experience outside of the classroom with fields of study.	Demonstrates some understanding of how one's own experience outside of formal classroom relates to fields of study.
Connections to discipline *Sees (makes) connections across disciplines, perspectives*	Extends and recombines theories/frameworks using examples and facts to deepen analysis of issues or define/solve problems; takes multiple perspectives on a range of issues.	Uses examples, facts, and theories from beyond a field of study, and identifies multiple perspectives.	Includes an example, fact, or theory from outside a field of study; acknowledges the presence or possibility of other perspectives.	Stays within the confines of a discipline in the context of assignments; and articulates one perspective.
Transfer *Adapts knowledge, concepts, and/or tools from one discipline to another*	Adapts familiar frameworks for new uses.	Synthesizes familiar frameworks into new uses.	Applies familiar frameworks to new situations.	Connects familiar frameworks to new situations.
Communication *Balances form and content in communication choices*	Within context of portfolio (or artifacts being reviewed), demonstrates clear ability to integrate or synthesize content, medium, and form to skillfully communicate complex learning.	Begins to use medium and form to contribute and respond to content.	Demonstrates of an awareness of how form can contribute and respond to content.	Uses medium and form adequately to convey content.
Identity as Learner *Reflects on*	In challenging learning situations, articulates one's identity as a learner and contributor to a variety of settings, which may include academic work, campus and civic environments.	Articulates one's identity as a learner, beginning to contribute in environments characterized by ambiguity and risk.	Articulates one's own learning strengths and sets goals for improvement.	Begins to identify one's self as a learner, differentiating appropriately one's self from what one is learning.

AAC&U Outcomes for VALUE Rubrics

- Inquiry and analysis
- Critical thinking
- Creative thinking
- Written communication
- Oral communication
- Quantitative literacy
- Information literacy
- Teamwork
- Problem solving
- Civic knowledge and engagement—local and global
- Intercultural knowledge and competence
- Ethical reasoning and action
- Foundations and skills for lifelong learning
- Integrative learning

www.aacu.org/value/rubrics

Using evidence to improve student learning

CIC/CLA Consortium
- 50+ institutions use the Collegiate Learning Assessment (CLA) and share results.
- Interpret CLA results in conjunction with other assessment measures, such as NSSE and portfolio analyses.
- Create a campus culture of assessment that is based on evidence.

Resource: Searchable Inventory of Tools

- NILOA & AIR Resource

- Includes 250 instruments; and software tools; benchmarking information; and projects, initiatives, and services for assessing program and institutional effectiveness

www.applications.airweb.org/surveys/

Measuring Quality in Higher Education

Introduction | Organization | Guidelines | Inventory | Additional Resources | About the Authors | Contact

Inventory

☑ (Click Here to Expand Search Options)

Showing: 1 - 20 of 249   Surveys/F

Adult Learner Needs Survey
ACT, Inc.

Email: outcomes@act.org

Call: 1-800-294-7027

Category: Instruments
Unit of Analysis: Student
Level of Assessment: Institution-Level; Other/Non-specific
Target: Attitudes, Beliefs or Values; Characteristics, Qualities or Opportunities

P.O. Box 168
Iowa City, IA

Explores the perceived educational and personal needs of adult students, or of prospective adult students in the community.

Alumni Outcomes Survey
ACT, Inc.

Email: outcomes@act.org

Call: 1-800-294-7027

What is Important in Student Learning Outcomes Assessment?

- Multiple, meaningful, measures

- Diagnostic, milestone, & culminating assessments all necessary

- Wide range of assessment practices–assessments of learning environment, authentic assessment, student work, direct learning outcomes, "value-added"

- Measures of college-level learning by different majors, fields, levels

- Demonstrate action on assessment results

- Quality improvement – measuring change, real improvements in student learning

NILOA Conclusions

- Most institutions use multiple measures to determine student learning outcomes

- Relatively few schools "closing the loop," or using information to modify policy/practice

Lessons from Wabash National Study

Center of Inquiry

WABASH COLLEGE

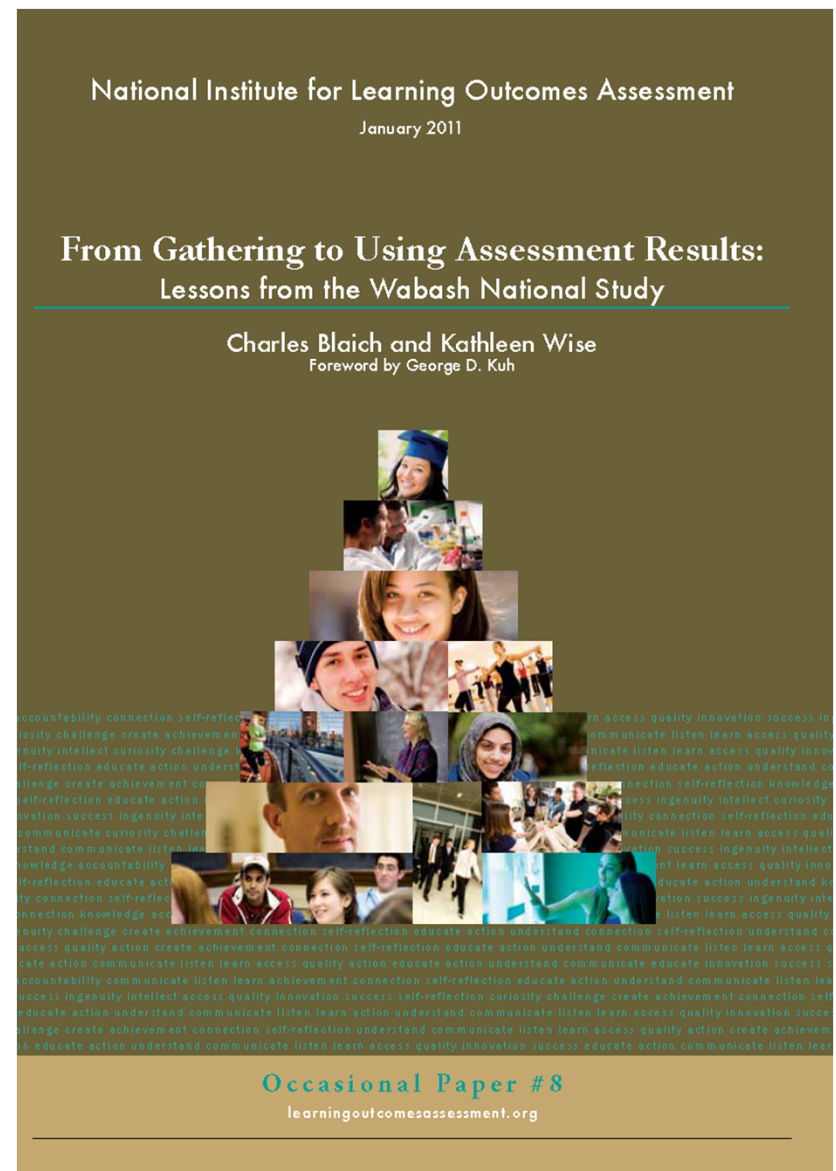- – a longitudinal research and assessment project

- – provides participating institutions extensive evidence about the teaching practices, student experiences, and institutional conditions that promote student growth across multiple outcomes

- – Information designed to help schools figure out what can be done to improve student learning

www.liberalarts.wabash.edu/

Measuring student learning & experience is the <u>easiest step</u> in the assessment process. The real challenge begins once faculty, staff, administrators, and students try to use the evidence to improve student learning.

National Institute for Learning Outcomes Assessment

January 2011

From Gathering to Using Assessment Results:
Lessons from the Wabash National Study

Charles Blaich and Kathleen Wise
Foreword by George D. Kuh

Occasional Paper #8
learningoutcomesassessment.org

www.learningoutcomesassessment.org/documents/Wabash_000.pdf

Lessons from the Wabash National Study

- **<u>Faulty</u> assumptions about using evidence:**
  - lack of high-quality data is primary obstacle
  - providing detailed reports is the *key* mechanism for kicking of a sequence of events culminating in evidence-based improvements
  - intellectual approach that faculty and staff use in their scholarship facilitates assessment projects

Moving Beyond Massing Data

Most institutions have more than enough actionable assessment evidence— national surveys, standardized measures, information in institutional databases, student interviews, reports from external reviewers...about student learning – <u>the challenge is data utilization</u>

To Move Beyond Piles of Data

1. Perform audits of your institutions information about student learning & experience

2. Set aside resources for faculty, student & staff responses before assessment evidence is shared

3. Develop communication plans to engage a range of campus representatives in data discussions

4. Use conversations to identify 1-2 outcomes on which to focus improvement efforts

5. Engage students in helping to make sense of and form responses to assessment evidence.

Marks of Advanced SLO Assessment

Faculty invested in development of approaches & identification of measures ✓

Multiple measures ✓

More faculty aware of markers of student success & learning (progress rates, troublesome courses) ✓

"Closing the loop", evidence of change ✓

Sharing results with students, communicating how results are used ✓

To Consider…

- **Attend to tension between accountability and improvement**

- **Measure things that matter** in context of mission, values, and desired outcomes

- **Focus on** mission-relevant, educationally meaningful indicators linked to student success **that the institution can do something about**

- **Adopt best practices in assessment, public reporting, and improvement**

Discussion and Questions

NILOA

www.learningoutcomesassessment.org

EXTRA SLIDES

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NILOA Activities

➢ **Web scans: 700 institutions**

➢ **Interviews & focus groups with key actors**

➢ **"Go to" Web site**

➢ **White papers on key topics**

➢ **Provost (1,500) and Program-level surveys (950)**

➢ **Transparency framework**

'Academically Adrift'

"If the purpose of a college education is for students to learn, academe is failing, according to *Academically Adrift: Limited Learning on College Campuses*."
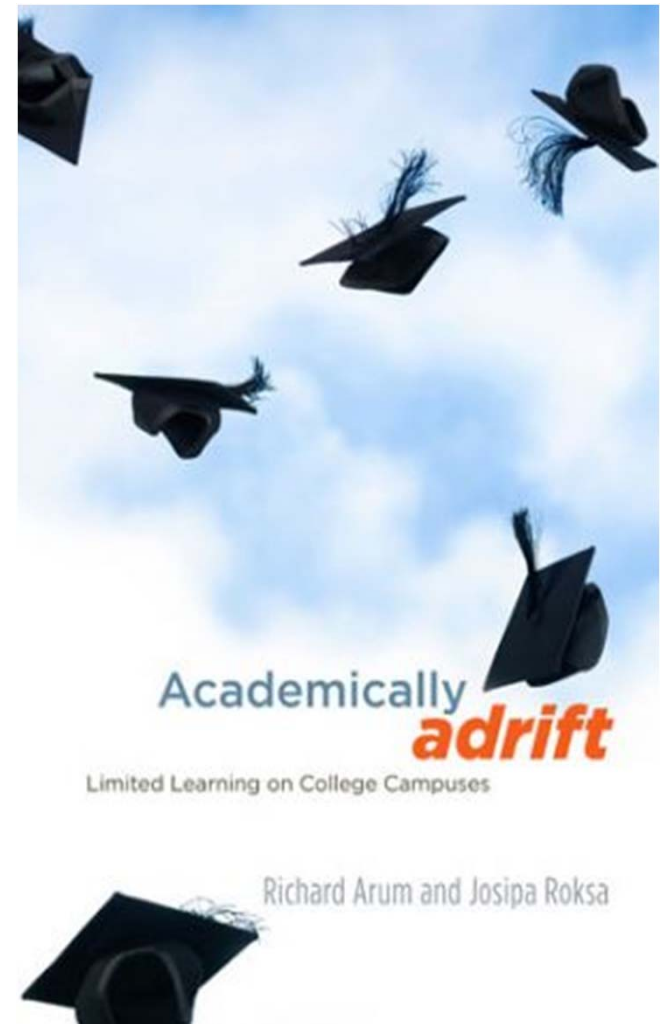
Academically Adrift: Limited Learning on College Campuses (2011, *University of Chicago Press*)

Academically Adrift: A Perfect Moment?

- **If book is right:** Under what circumstances do student learn? And what do we know about this? What are the conditions that promote learning and success?

- Concern about student learning outcomes demands that we examine educational practices.

- Draws renewed attention to the learning environment.

- *What can we do to address the finding that students aren't learning?*

We know a lot about What Matters to Student Learning & Success

The challenge is using what we know.

Aligning resources, removing impediments, to optimize success for all students.

What We Know About Student Success:

- **Student engagement in intentionally designed educationally purposeful activities is necessary to achieve desirable learning outcomes.**

- **Institutions must deploy resources appropriately and provide students explicit messages about success-oriented behaviors.**

- **Institutions need information about how well they're doing & to use this information.**

Lessons from Teagle projects using evidence to improve student learning

- Teagle-funded assessment projects to use data to improve

- What contributed to the progress and achievements of six "collaboratives" of 30 baccalaureate colleges?

The Teagle Foundation

Teagle supports projects that involve multiple campus constituencies in the systematic improvement of student learning, bringing together faculty, administrators, students, and others to develop fresh approaches to liberal education.

www.teaglefoundation.org/

Lessons from Teagle projects using evidence to improve student learning

Persistent Challenges to Using Evidence to Improve:

The Teagle Foundation

- Resources for national instruments and faculty development stipends
- Translating assessment data into improved teaching and learning and faculty performance
- Dealing with campus structures (governance, committees, promotion and tenure) that do not support assessment
- Managing disappointing assessment results
- Not getting caught up in MORE data collection
- Staying the course

Lessons from Teagle projects using evidence to improve student learning

What facilitated work?

The Teagle Foundation

✓ Spend time getting organized

✓ Employ a faculty-friendly incentive structure

✓ Many roads lead to the assessment mountaintop

✓ Celebrate small wins

✓ Academic leadership essential

✓ Capitalize on the power of peer influence, accountability to the collaborative