Creating and Sustaining a Cross Campus Culture of Evidence & Data Use

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National Institute for Learning Outcomes Assessment (NILOA)

APLU Commission on Information, Measurement & Analysis Summer Forum
July 12, 2015
Since 2008, NILOA’s mission has been to discover and disseminate effective uses of assessment data to strengthen undergraduate education and support institutions in their assessment efforts.

- **Surveys**
- **Web Scans**
- **Case Studies**
- **Focus Groups**
- **Occasional Papers**
- **Website**
- **Resources**
- **Newsletter**
- **Listserv**
- **Presentations**
- **Transparency Framework**
- **Featured Websites**
- **Accreditation Resources**
- **Assessment Event Calendar**
- **Assessment News**
- **Measuring Quality Inventory**
- **Policy Analysis**
- **Environmental Scans**
- **Degree Qualifications Profile**
- **Tuning USA**
- **Coaching**
- **Assignment Design**

[www.learningoutcomesassessment.org](http://www.learningoutcomesassessment.org)
NILOA Assertion:

Understanding what students know and can do as a result of their college education is fundamental to student success and to the quality and effectiveness of American higher education.
A new NILOA report, "Focused on What Matters: Assessment of Student Learning Outcomes at Minority-Serving Institutions" is now available.

In the News | Archive

**A Review of External Examining Arrangements Across the UK**
Thu, Jul 09, 2015 - 08:00 am
Higher Education Funding Council for England
The Higher Education Funding Council for England conducted a review of UK's external examining arrangements and found that academic standards could be strengthened. This report includes suggestions for training and organization that might improve examining arrangements.

**Academic Pathways Fuel Reforms**
Thu, Jul 09, 2015 - 08:00 am
Bob Woods in Community College Daily
Bob Woods wrote about the need for clearer pathways for completion within community colleges. He provided a discussion on approaches from statewide efforts to partnership initiatives, along with providing institutional examples.

**Education's "pea in the mattresses": A tale of layers and royal domains**
Wed, Jul 08, 2015 - 08:00 am
Brad C. Phillips and John Yopp in The Synapse
Phillips and Yopp argued that K-12 schools and higher education institutions ought to work closer together in determining student readiness as they transition from high school to college. They point out political obstacles that hinder such partnerships, all of which may
“Extensive use of data to inform decisions remains more an aspiration than a reality for most colleges & universities.”

Many institutions have insufficiently invested in the personnel, data-management systems, and statistical software needed. (AIR data capacity survey)
2 of 3 college presidents felt that: “their institutions are not particularly strong in using data for making decisions.” (Inside Higher Education survey, 2012)
Grant makers and accrediting bodies have increased pressure on institutions to use data for decision making

FPU WASC Accreditation statement:

In every FPU office, data is constantly being collected, organized, and assessed to determine how effectively we are supporting students’ needs. From assessment comes meaning, which moves us to action. That story has become an enduring theme.
Even in the field of assessment, despite 30 years of effort, student learning outcomes assessment has had an embarrassingly modest impact on student and institutional performance (Kuh, Ikenberry et al., 2015)

- Has the process of assessment taken precedence over the use of findings to improve?
- Is the use of evidence mired in a culture of compliance, rather than driven by a collective concern about student performance or an ethos of improvement?
Using Evidence

Using Evidence of Student Learning to Improve Higher Education

George D. Kuh, Stanley O. Ikenberry, Natasha A. Jankowski, Timothy Reese Cain, Peter T. Ewell, Pat Hutchings, Jillian Kinzie
Data Gathering Exercise

What does a “culture of evidence” or a culture of “data use mean” to you?
What does it LOOK like?
Would you know it when you see it?
Culture of Evidence Defined

• Systemic and regular processes to use data for decision making
• Planning and decision-making processes at all levels of the institution are informed by data
• Institutional and individual reflection and action are typically prompted and supported by data about student learning and institutional performance
The Emphasis on Culture

- CULTURE = “Patterns of basic assumptions that a group has invented, discovered, or developed in learning to cope..., and that have worked well enough to be considered valid, and taught to new members as the correct way to perceive, think, and feel in relation to those problems” Bess & Dee, 2008

ASK: “To what extent does the use of evidence (data in various forms) influence how we behave?”
Behavior in a Culture of Evidence

- Staff think regularly about availability of hard data
- Awareness of data in other offices on campus, the results of which are widely available
- Use of available data, or collection of new data, to make decisions about issues
- Initial reaction to problems/concerns is to think about information needed to make a judgment about presenting issue
- Approach to dealing with problems is to think first about the data needed to make decision
- Evaluation of issue is determined by returning to data to look for change
- Willingness to act on evidence

An Example: Career Services
Elements of a Culture of Evidence

• Questioning Stance
• Shared responsibility of meaning-making (not the purview of one office)
• Communication on how evidence was used and what happened as a result
• Evidence is organized in meaningful ways
• Access to data is prevalent and targeted
• Awareness that what is being organized and how it is organized will impact the culture trying to create
Implications of a Culture of Evidence

- Habits of question asking, reflection, deliberation, planning, and action based on evidence, are the norm.
- Campus pulls together an integrated story of its efforts to provide students with a meaningful educational experience.
Shifting from...

Looking to data for the use to emerge instead of creating space for use of data to drive meaningful engagement

The illustrative case of action analytics
Current & Future Issues for Creating and Sustaining a Culture of Evidence in Higher Education
What if instead of...
Or this...

If I'd known they wanted me to use all this info, I would never have asked for it!
We used data internally...

• Move from focusing on gathering, disseminating, or providing access to information to communicating effectively

• Move from a few with access or knowledge to information flows through cross-campus committees

• Move from sending out reports to allowing space for meaning-making and use to occur

Use is a cognitive process
How can we make this shift?

• Map our work
• Undertake a data audit
• Who is on which committee? And who has access to what data?
But how can we?

• Feeling overwhelmed with mapping and doing a data audit? Is that because you are assuming an office on campus or a person needs to do it who is busy doing other things?

• What if it was a student project? Allowing them an opportunity in a class to work on quantitative reasoning, communicative fluency, use of information resources, etc.
Culture Means Everyone

Ask ourselves:
• We have so much data – but to what end?
• Are we thinking about how the data will be used from the outset?
• Are we considering the types of decisions the data might influence?
• Are we aware of what counts as evidence and for whom?
• Are we intentional about who we involve and how we involve them?
What you want to say.

What they're interested in.

Relevance
What’s the Evidence?

What is student data?

There are many types of data that support student learning—and they’re so much more than test scores. But individual data points don’t give the full picture needed to support the incredibly important education goals of parents, students, educators, and policymakers. See the types of data that can come together—under requirements like privacy and security—to form a full picture of student learning. When used effectively, data empowers everyone.

Types of data

- Academic Information
  - Growth
  - Courses
  - Enrollment
  - Grades
  - Completion
  - Graduation
- Testing
  - Quizzes
  - Tests
  - Interim Assessments
  - Annual Assessments
- Demographics
  - Age
  - Race
  - Gender
  - Economic Status
  - Special Education Needs
- Actions
  - Attendance
  - Behavior
  - Extracurricular Activities
  - Program Participation

By teachers

- Observation
- Engagement

By students

- Homework
- Learning Apps

Requirements

To get that full, clear picture, important requirements must be met for information to be truly useful and to empower people:

- Available: Data must be there when you need it.
- Complete: It must provide a whole picture of student learning.
- Relevant: Data must be relevant to your needs.
- Secure: It has to be safeguarded and trustworthy.
- Effective: Educators and policymakers must have the skills to use data effectively.
- Communicate: Data must be used to communicate how students and schools are doing.
- Support: It should be used to support leaders and educators.
- Improve: And data should be used to improve learning.

Success

The right data, in the right format, used the right way, empowers everyone with the information they need to make decisions and take actions that lead to student achievement.

Student success depends on parents who support their kids' academic growth at home.

Student success also depends on teachers to design effective instruction and individualized lessons.

When students, parents, educators, and policymakers have the right information to guide their decisions, students achieve their best.
Who are the likely users of the evidence we want to gather and how will they use it?
## Make a table

<table>
<thead>
<tr>
<th>Audiences</th>
<th>Users</th>
<th>Evidence</th>
<th>Questions</th>
<th>Other</th>
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Make a list of all the audiences for the data, which are users, what counts as evidence for them, and for which questions the evidence provides answers.
What else can we change?

Our reporting

• Group by question instead of data source (St. Olaf)
• Data presentations – go for myth busting
• Student data presentations
• Space for conversations on the data

What role do data management systems have to play?
Communication is key

- Internal and external communication
- Organization of information
- More information is not always better – help stakeholders make sense of what the evidence means for the institution and student learning
Factors Influencing Organization

• Context
  - History, culture, size/setting, student population

• Internal Structures
  - Governance, reporting, levels for assessment

• Wider Environment
  - Instit. Type, Control, External Influences

• Philosophy
  - Mission, Purpose & Focus, Instit. Norms
Question time

What elements do you have that you can build from?

Which elements need immediate attention?
Roles

• Leadership
• Those collecting or entering data
• Analysis and report generators
• Professional development folks to enhance user analysis abilities
Who needs to be involved?

• Who on your campus is most involved in using data for decision-making?

Who needs to be involved?
A wide array of higher education employees can be actively involved in turning data into decision-support information.
Widening Access to Data

• Wider access to analytical tools and reporting software by more people on campus
• Models of decision making are changing, opening up new opportunities for wise use of data resources

DATA ARE EVERYWHERE!!
What is the Value of Widening Access and Bringing More People into Data Conversations and Increasing the Use of Evidence?

What are your concerns?
Developing Effective Data Systems

• More sophisticated, effective options for managing and integrating data & making it available
Increasing Data Literacy on Campus

• **Capacity Building**
  - Campus data professionals group
  - Assist leaders in developing and refining questions
  - Train units throughout the institution

• **Development of data systems**
  - Allows campus constituents to interact with data and do their own research
  - Analytics “consulting” or co-research projects
Ensuring Evidence is Consequential

If we focus on making evidence consequential – then assessment is driven by genuine needs and challenges faced by campuses and the students they serve. It is question driven.
Example: Questions Drive Assessment for Improvement and Teaching Excellence

• Assessment at Carnegie Mellon University is driven by questions raised by faculty & departments about student learning & effective teaching and is informed by curricular interests, program goals, and the discipline.

— Eberly Center is the hub of assessment support
What are Cross-Cutting Data Concerns?

CIMA survey revealed where data are or could be used to improve campus decisions, e.g. retention & enrollment management, completion, workload analyses, & accountability

• What are your top 3 topics where data could be used to improve campus decisions?
Building an Ethos of Improvement

• Reframing the reason why we collect data
  “Let’s just get a little bit better at what we do the next time we do it.”
• Calming the fear of data’s personal implication
  “You’re never as good as your best day and never as bad as your worst.”
• Being human in the midst of a sea of data
  “It’s not the data point that matters, it’s what you do with it.”

Credit to Mark Salisbury at Augustana
Example: Ethos of Improvement

- Provide oversight – coordinate and review
- Increase internal knowledge sharing
- Structural support

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<thead>
<tr>
<th>National Survey of Student Engagement Results: Overall Student Satisfaction*</th>
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<td><strong>UMass Lowell Freshmen</strong></td>
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<td><strong>N.E.</strong> Publics Freshmen</td>
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* On a scale of 1 = “Poor” and 4 = “Excellent.” ** N.E. = New England

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* For Freshmen, these High-Impact Practices include Learning Community, Service-Learning, Research with faculty; For Seniors, these include Internship, Study abroad & Culminating senior experience in addition to those for Freshmen
Increasing Transparency

While most institutions are communicating something about their assessment data, institutions should be encouraged to become much more transparent in this important area of institutional performance

– NILOA Provost report (2014)

www.learningoutcomesassessment.org/knowingwhatstudentsknowandcando.html
Evaluation / Assessment

Components of Student Learning Assessment

Current Assessment Activities:

- IUPUI Campus Assessment Reports
- School Assessment Reports
- Ten-Year Summary Reports by academic and administrative units

Program Review and Assessment Committee (PRAC)
Evidence of Student Learning

Component:

Evidence of Student Learning

Evidence of student learning includes results of assessment activities. This may include evidence of indirect (e.g., surveys) and direct (e.g., portfolio) student learning as well as institutional performance indicators (e.g., licensure pass rate).

MSU Quality Initiative Project (QIP): Public Affairs Assessment

As part of the Higher Learning Commission Open Pathway, Missouri State University conducts a Quality Initiative project (read more here). For this project, faculty, staff, and students reviewed student work related to the public affairs mission during review sessions in May and October of 2013. Another review session will take place in May 2014. The following reports present an overview of the review process and results from previous review sessions.

- Summer 2013 Full Report
- Summer 2013 Summary
- Fall 2013 Summary
- Summer 2014 Summary

Beginning College Survey of Student Engagement (BCSSE)

Missouri State University administered the BCSSE to samples of incoming students in 2008 and 2011 (read more here). The results of those surveys and the paired NSSE results are below.

- BCSSE Institutional Reports
  - 2008
  - 2011
- BCSSE-NSSE Combined Reports
  - BCSSE 2008-NSSE 2008
  - BCSSE 2011-NSSE 2012

National Survey of Student Engagement (NSSE)

The NSSE measures how students at Missouri State University spend their time and what they gain from attending college (read more here). The reports below show results from previous survey administrations and help answer the following questions. What is the extent of Missouri State’s influence on academic and intellectual experiences, cognition, reading and writing? How do students perceive the quality of their relationships with faculty and staff? To what extent have their experiences at Missouri State impacted their educational and personal growth?

To see how NSSE data can be used, go to the NSSE Search Tool for Examples of NSSE, FSSE, and BCSSE Data Use.

Means and Frequencies

- 2012
- 2000
- 2008
- 2007

- Multi-Year Comparisons

Executive Snapshots

- 2012
Leading in a Culture of Evidence

Leadership for making sense of, strategically applying, and communicating data & findings to diverse audiences in ways that prompt organizational learning and stimulate people’s desire to know more and then act on the information.

- **Leaders must advocate for, and maintain focus on, this mode of thinking and practice.**

Developing a Cross Campus Culture of Evidence

• Campus-wide expectations for and involvement in using evidence for decision-making

• Institutional research is everywhere...
Example: Elements of a Culture of Evidence Emphasizing Student Learning

- Is there institutional consensus on student learning goals?
- Are expectations and support for students elevated?
- Does rigorous & comprehensive assessment of student learning exist?
- Is the assessment loop purposely closed?
- Are P&T criteria learning-oriented?
- Do all faculty & staff have an instructional role?
- Do continuous faculty & staff development programs exist?
- Are academic & student affairs tightly coupled?
- Are decisions made on the basis of data?
- Is assessment celebrated and if so, how?
- Does the institution engage in benchmarking projects where data are compared with similar data from peers?
Continuum of a Culture of Evidence

- Little to no data
- Mixed data quality
- No press for data use
- Little motivation to improve
- Data owned/controlled by few
- Data sources
- Data silos
- Few questions of data
- Password protected

- Plenty of data
- Good data quality
- Significant press for data use
- Ethos of improvement
- Data available to many
- Data systems
- Shared systems
- Many questions need data
- Transparent
Inventory of Culture of Evidence

To what extent is this practice implemented?

- Information systems provide systematic, timely, useful, and user-friendly information on matters of consequence
- Culture promotes willingness of governing board members, administrators, faculty, staff and students to rigorously examine and openly discuss data & institutional performance
- Regular data collection, analysis, and reporting
- Evidence is used routinely to inform institutional decisions
- Beliefs and assertions about “what works” are evidence-based
To Ponder: How can CIMA help...

• Create institution-wide understanding of the use of evidence in decision making?
• Work with units across campus to “make data use part of the culture”?
• Continuously measure activities and outcomes deemed key in the achievement of the institution’s goals, and participation in the review of these measurements with those responsible for the successful execution of the activities?
• Involve all institutional units in the culture of evidence?
• Embrace improvement & change as a positive and continuous value”?
• Base more decisions on evidence, and not just past practices?
Final Thoughts

The value of student learning outcomes assessment lies not in the data-gathering process but in the uses to which evidence is put and positive changes result.

What is needed to make assessment less about compliance and more consequential on your campus?
Questions? Comments?

Resources

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http://www.learningoutcomeassessment.org/

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