Creating and Working Within a Culture of Evidence

OR

Making Decisions Using A Culture Of Evidence Rather Than A Culture Of Anecdote

Jeffrey A. Seybert
Director, The National Higher Education Benchmarking Institute
Johnson County Community College

What Is A "Culture Of Evidence?"

- A culture wherein indicators of performance are regularly developed and data collected to inform decision-making, planning, and improvement.
- A culture wherein individual and institutional reflection and action are typically prompted and supported by data about:
  - Student persistence
  - Student learning
  - Institutional performance

What Do We Mean By "Evidence"?

- It is comprised of data, information, and knowledge.
- It can be quantitative, qualitative, or both
- It can be both direct and indirect
- It supports a claim, answers a question, leads to knowledge (a.k.a. "learning")
- It stimulates analysis, interpretation
- It's an occasion for communication, process
- It suggests actions

Characteristics Of "Good" (i.e. Effective) Evidence

It is:

- Relevant – it reflects the underlying concept of interest
- Verifiable – it is documentable and replicable
- Representative – it is typical of the underlying situation or condition
- Cumulative – it is obtained from multiple sources using multiple methods
- Actionable – it provides guidance for action and improvement

Components Of A Culture Of Evidence

- Student cohort tracking
- Systematic collection, analysis, and reporting of key data on student progress, learning, and success
- Institutional research and information systems
- Support for rigorous examination and open discussion of institutional performance

Components Of A Culture Of Evidence (cont'd.)

- Routine disaggregation and reporting of data by age, race/ethnicity, gender, and income level
- Regular assessment of educational practices "behind the outcomes."
- Systematic program review/evaluation
- Routine use of data and information to inform institutional decisions (e.g., priority-setting, planning, resource allocation, professional development, improvements in programs and services for students)

Pitfalls To Avoid

- "Data Lust"
  - You can't measure everything
  - The best evidence is selective-guided by institutional priorities and strategic goals
- "The Perfect Data Fallacy"
  - Data and evidence in higher education are, by their nature, imprecise
  - We must employ multiple methodologies and sources
- "Stopping Too Soon"
  - The processes involved in a culture of evidence are never really completed
  - Deploying a culture of evidence is a continuous, ongoing, iterative process

What A Culture Of Evidence Won't Do

- Prescribe exactly what needs to be done
  - It only suggests directions/actions
  - Specific institutional action must be arrived at through reflection and analysis of evidence
- Actually get anything accomplished
  - Evidence must be acted on
  - In and of itself, evidence cannot "do" anything in terms of institutional action and improvement

The Foundation Of An Effective Culture of Evidence:

An Institutional Effectiveness Plan/Model

Major Components

1. Mandatory Entry-level Assessment & Placement (www.act.org)
2. Needs Assessments for Proposed New Programs
   a. Potential employers
   b. Potential students
3. Former Student Follow-up
   a. Transfer students and their subsequent academic progress and performance
   b. Career program completers
   c. "Leavers"

Major Components (cont'd.)

4. Employer Follow-up
5. Assessment of Student Learning Outcomes
   a. General education
   b. Disciplinary competencies/outcomes
6. Systematic Program Review/Evaluation
   a. All academic programs
   b. Continuing education/community services
   c. Student, auxiliary, and administrative support services/offices

Major Components (cont'd.)

7. Assessment of Developmental Programs and Courses
   a. Student success in developmental courses
   b. Completion of the developmental sequence
   c. Developmental students' success in first college-level course
8. Annual/Biennial Client/User Evaluation Surveys
   a. Library/open labs/resource centers
   b. Student services
   c. Auxiliary services

Major Components (cont'd.)

9. Student Evaluation of Instructors/ Counselor/Advisors (www.idea.ksu.edu)
   a. Credit
   b. Continuing education/community services/ business & industry & contract training
10. Periodic Assessment of Campus Climate/Faculty & Staff Morale (www.ced.ncsu.edu/ahe/nilie)

Major Components (cont'd.)

11. Periodic Assessment of Community Image/Satisfaction with the College
12. Assessment of Student Satisfaction/ Engagement (www.act.org; www.noellevitz.com; www.ccsse.org)
13. Periodic Assessment of Area Business and Industry Training Needs
14. Benchmarking

Dashboards in Higher Education: Graphic Representation of Key Performance Indicators

What is a Dashboard

- A brief document that graphically displays critical institutional information in a succinct, easily understood, visually appealing format
- A tool to communicate the current health of the organization and its progress toward its strategic objectives

Purposes of Dashboards

- To communicate current information about major indices of organizational performance to primary stakeholders
- To provide information to assist in evaluation of organizational performance
- To provide a comprehensive analysis of the organization's achievement of its strategic objectives
- To provide information about organizational performance compared to appropriate benchmarks

Why Do We Need Dashboards?

- Institutional leadership has a responsibility to be accountable to both internal and external stakeholders
- Stakeholders want/need accurate, concise, easy-to-understand, up-to-date data & information about organizational performance
- Traditional communication sources in higher ed. (e.g., annual reports) are usually obsolete by the time they reach stakeholders and typically fail to provide necessary/sufficient detail about organizational performance

Components of Dashboards

- A limited set of measures—usually referred to as **"Key Performance Indicators" (or KPIs)**
- An integrated data structure for that set of measures
- A source of comparative benchmarks for the measures
- Graphics for displaying the measures

Characteristics of an Effective Dashboard

- Operationally focused—tied to the institution's mission and strategic plan
- Timely
- Accurate
- Easy to understand
- Represents the current state of the organization
- Provides a straightforward summary of organizational performance

KPIs — What Are They?

Data elements that :

- Measure core inputs, outputs, and outcomes
- Reflect the institution's strategic plan and core business
- Measure high priority operations of the institution
- Measure institutional characteristics that are important and meaningful to stakeholders
- Measure institutional performance in areas in which it must be successful to survive and be competitive

Examples of KPIs

- Enrollment
  - Fall headcount enrollment
  - Percent of area high school grads enrolling subsequent fall
- Student progress
  - Fall-to-fall persistence
  - Term-to-term persistence
- Student success
  - Graduation rate
  - Transfer rate
  - Workforce placement rate

Identification of KPIs—Who's involved

- Effort usually led by a Dashboard Development Team
  - Representative of senior leadership
  - Representative of IR
  - Representatives of key constituencies
- Team solicits input from affected work groups and administrators
- Senior leadership (president's cabinet?) makes final determination of which measures are included in the dashboard

How KPIs are Identified

- They are an outgrowth of strategic planning
  - Important and meaningful to stakeholders
  - Viewed as important to the organization
  - Linked to strategic plan and organizational priorities
  - Help determine the extent to which the organization is progressing toward its stated goals
- Team can begin with a large number of potential KPIs and then whittle down to the vital few—no more than 15-20

Context for KPIs: Benchmarks & Target Values

- Process also requires establishing benchmarks and target values
  - Benchmarks
    - ✓ What are reasonable values for measures
      - – Upper and lower limits
      - – What is "good" and "bad" for a given measure
  - Targets
    - ✓ How do we know where we want to be?
    - ✓ Based on both benchmarks and past performance
    - ✓ Must be reasonable and achievable
      - – Can (should?) be "stretch objectives"

A KPI in Detail

Performance Indicator (PI 22): Transfer Rate

Definition: The percent of Fall, transfer-intent, first-time SCC enrolled students who also enter a degree program at a four-year institution within three years (9 terms).

How the PI is measured: To be eligible for the cohort, students had to have the following characteristics:
1. Were enrolled at SCC for the first time in a Fall cohort term.
2. Were 18-22 years old.
3. Were enrolled full time in a Fall cohort term (i.e., taking 12 or more hours).
4. Cumulated at least 12 SCC credit hours three years after their first Fall cohort term at SCC.
5. Specified a transfer intent on their SCC application.

Source:
- National Student Loan Clearing House data
- STACS

PI Standard:
- Exceeding Expectation: > 60%
- Meeting Expectation: 50% - 60%
- Needs Improvement: 40% to 49.9%
- Alarm Bells: <40%

Dashboard Examples – St. Charles Community College

SCC PI Report: Executive Dashboard Summary

Student Success
- 1 Persistence Rate Fall To Fall[1,2]
- 2 Occupational-Technical Degree Satisfaction[3]
- 3 Transfer-Degree Satisfaction[4]

Career Preparation
- 4 Licensure Pass Rate[5]
- 5 Placement Rate In Workforce[3]

Student Satisfaction
- 6 Overall Student Satisfaction[6]
- 7 Student Services[6]
- 8 Academic Services[6]
- 9 Administrative Services[6]
- 10 Non-Academic Facilities[6]
- 11 Academic Facilities[6]

Developmental Education
- 12 Math[2]
- 13 English[2]

Student Self-Assessment Of General Education Gains
- 19 Personal/Social Gains[7]
- 20 General Education Gains[7]
- 21 Practical Competencies[7]

Transfer Success
- 22 Transfer Rate[1,8]
- 23 Academic Success After Transfer[1,8,9]
- 24 Persistence After Transfer[1,8]

Best Educational Practices
- 14 Active And Collaborative Learning[7]
- 15 Student Effort[7]
- 16 Academic Challenge[7]
- 17 Student-Faculty Interaction[7]
- 18 Support For Learners[7]

PI Standard
- Exceptional performance
- Above Benchmark
- Below Benchmark
- Alarm Bells

Dashboards – Strengths

- Relatively straightforward way to monitor current institutional performance
- Provide metrics on KPIs that represent core institutional goals, issues, and operations
- Easy to understand
- Engaging presentation format to communicate important information
- Can be used at all levels of the institution

Dashboards – Challenges

- Design and implementation require a comprehensive understanding of complex data definitions, sources, appropriate analyses, and sources of appropriate benchmarks
- Don't provide an in-depth understanding of underlying data that drive the KPIs
  - --Limited in scope and somewhat simplistic
  - --Lack of detail makes it difficult to understand the "whys" of institutional performance
- Provide no information regarding what should be done—no guidance for institutional action
- To be optimally effective need to be supported by formal underlying data structure with drill-down capabilities—a balanced scorecard

Questions