

BREAKOUT SESSION 3

Identifying and Using Evidence to Improve Learning

Dr. Marsha Watson

Activities

- The Evidence Inventory
 - ▣ Inventory the assessment evidence you are already collecting
- Developing, Selecting, and Refining Assessment Measures
 - ▣ Develop/select new assessment measures, and/or refine current assessment methods/measures

SACS Requirements & Expectations

- The Comprehensive Standards
 - ▣ 3.3.1: The institution identifies expected outcomes, assesses the extent to which it achieves these outcomes, and provides evidence of improvement based on analysis of the results in:
 - 3.3.1.1: educational programs, to include student learning outcomes ...
 - Documents listing expected outcomes for all programs
 - Evidence that learning outcomes are evaluated and achieved

SACS Requirements & Expectations

- Evidence that supports compliance must be:
 - Reliable
 - Current
 - Verifiable
 - Coherent
 - Objective
 - Relevant
 - Representative
- Entail interpretation and reflection
- Represent a combination of trend and snapshot data
- Draw from multiple indicators

General Definitions

- Information that tells you something directly or indirectly about the topic of interest
- Evidence is neutral -- neither “good” nor “bad”
 - ▣ Requires **context** to be meaningful
- Two types of assessment evidence
 - ▣ Indirect methods measure a proxy for student learning
 - ▣ Direct methods measure actual student learning
- “Learning” = *what students know* (content knowledge) + *what they can do with what they know*

Direct Evidence

- Students show achievement of learning goals through performance of knowledge, skills:
 - ▣ Scores and pass rates of licensure/certificate exams
 - ▣ Capstone experiences
 - Individual research projects, presentations, performances
 - Collaborative (group) projects/papers which tackle complex problems
 - ▣ Score gains between entry and exit
 - ▣ Ratings of skills provided by internship/clinical supervisors
 - ▣ Substantial course assignments that require performance of learning
 - ▣ Portfolios

Indirect Evidence

- **Indirect methods measure proxies for learning**
 - ▣ Data from which you can make inferences about learning but do not demonstrate actual learning, such as perception or comparison data
 - ▣ Surveys
 - Student opinion/engagement surveys
 - Student ratings of knowledge and skills
 - Employers and alumni, national and local
 - ▣ Focus groups/Exit interviews
 - ▣ Aggregate analyses of course grade distributions
 - ▣ Institutional performance indicators
 - Enrollment data
 - Retention rates, placement data
 - Graduate/professional school acceptance rates

Developing Measures of Effectiveness

- Intentional Planning
 - ▣ Determine assessment points: what course(s) are logical places to collect data?
 - Program entry, mid-point (if possible), exit
 - ▣ Identify/generate assessable assignments/instruments with an outcomes-based *purpose*
 - ▣ Design *non-passive* (performance-based) assignments/instruments
 - Ex: Written work, oral presentations, tests using open-ended questions ...
 - ▣ Develop/design outcome-focused opportunities for processing results, designing improvement actions

Self-Generated Tools

- Student work products already in place
- Expert judgments; rubrics
- Student self-reflection
- Peer assessments
- Group/team projects
- Employer/supervisor judgments

An Evidence Inventory

- Lets you discover the evidence you already have, such as:
 - ▣ Institutional Research data
 - ▣ Student Life data
 - ▣ Exit Surveys (seniors)
 - ▣ Alumni Surveys
- Start with the obvious ... but don't stop there

Assessment Inventory: One Example

Inventory of Written Statements and Plans

1. Do you have a written mission statement or statement of purpose?
 yes **no**

If yes, please attach a copy or reference where this can be found:

2. Do you have a written statement of intended educational outcomes describing what a student should know or be able to do when they have completed this program?
 yes **no**
3. Do you have a written statement articulating your preferred methods for measuring student outcomes?
 yes **no**
4. Does your program have a separate accreditation process?
 yes **no**

Assessment Inventory: One Example

Direct Methods of Assessment

1. _____ Comprehensive Examinations
2. _____ Writing proficiency Examinations
3. _____ National Examinations assessing subject matter knowledge
4. _____ Graduate Record Exam General Test
5. _____ Graduate Record Exam Subject Test
6. _____ Certification Examinations
7. _____ Licensure Examinations
8. _____ Locally developed pre-test or post-test for subject matter knowledge
9. _____ Major paper/project
10. _____ Program/course portfolios
11. _____ Capstone coursework
12. _____ Audio/video tape of presentations/performances

Appropriateness

- Does the evidence address student learning issues appropriate to the degree program, institution?
- Does the evidence tell you something about how well the degree program, institution is accomplishing its mission and goals?
 - The questions you have about student learning should guide your choice of appropriate, existing evidence and identify gaps where a new type of evidence might be needed

Addressing Common Barriers

- “This is a lot of work!”
 - ▣ Use some sort of evidence inventory to help faculty understand how existing academic practices yield evidence
 - ▣ Keep expectations reasonable, given limited time and resources
- **It is not necessary to gather all the evidence all of the time!**
 - ▣ Discover the joys of periodic assessment cycles and sampling ...

Addressing Common Barriers

- “My students pass the tests. Why isn’t that good enough?”
 - ▣ Tests often measure only content knowledge
 - ▣ Learning = **what students know** (content knowledge) + **what they can do with what they know** (performance)
 - ▣ Grades are generally not linked to specific learning outcomes
- Modify course tests to measure learning outcomes by adding performance assessments

Modifying Tests for Direct Evidence

- Identify questions on the test that provide evidence of a learning outcome:
 - ▣ Ex: Five questions that require the use of deductive reasoning to arrive at the right answer
 - ▣ Ex: Open-ended questions that require students to solve a unique problem given knowledge/skills learned
- Isolate those questions and look for patterns of performance:
 - ▣ Ex: The average grade in the class was a “B” but 85% of the students missed four of the questions requiring deductive reasoning
 - ▣ Ex: 70% of students were able to use a particular theory/approach to resolve the problem

Addressing Common Barriers

- “How do I know you won’t use this against me?”
 - ▣ Assessment is not faculty evaluation; results will only be reported in the aggregate
 - ▣ Ask faculty willing to engage in the process to disseminate her/his evidence, assessment practices
 - ▣ Link assessment results to allocation of resources through the Annual Review/Strategic Planning and Program Review processes

Meaningful Evidence

- Situated within the college, program, institutional mission and context
- Addresses relevant questions
- Analyzed and interpreted in relation to other evidence

Meaning Evidence: Facts + Context

- Example 1

- Fact 1:

- National survey data indicates seniors do not feel a sense of engagement and belonging on our campus

Meaningful Evidence: Facts + Context

□ Example 1

▣ Fact 1:

- Seniors feel disengaged from our campus (national survey data)

▣ Fact 2:

- Seniors would recommend this institution to other people (senior exit surveys)

Meaningful Evidence: Facts + Context

□ Example 1

□ Fact 1:

- Seniors feel disengaged from our campus (national survey data)

□ Fact 2:

- Seniors would recommend this institution to other people (senior exit surveys)

□ Context:

- Over the past five years, an average of 82% of first-year alums donated to the institution

Meaningful Evidence: Example 2

- Fact 1:
 - ▣ Senior exit surveys:
 - Indicate a dissatisfaction with the amount of time spent on clinical skills
- Facts 2 & 3:
 - ▣ Departmental assessment of skill ability and development finds that, of the critical skills required:
 - students are outstanding on three of them, satisfactory on two, and not acceptable on two
 - Internship evaluations from supervisors consistently cite lack of ability in clinical skills

Meaningful Evidence: Qualitative Data

- Appropriate uses:
 - Exploring an issue in more depth
 - Answering specific questions about individual experience:
 - Ex: How are you different now than you were before?
 - Ex: How did living with a host family inform your understanding of the culture?
 - Including student voices

Qualitative Data Analysis: Open-Ended Questions

- Strip and code the data
- Read the data, identifying themes and patterns
- Map themes and patterns to program learning outcomes
 - ▣ Presenting the data thematically will “lead” you somewhere
 - Academic Advising
 - General Education
 - Student perceptions of particular courses

Qualitative Data Example

- “420 was a senior level course but I felt like a freshman! There was no way I knew all of that stuff.”
- “I thought I was going to fail 420 and I’m a good student.”
- “I didn’t know how to do anything in 420 and the instructor didn’t care. We kept saying we didn’t know but he just kept going. It was ridiculous.”

Qualitative Data Example

- Drill down into the data by asking pertinent questions:
 - What are the learning goals of 420?
 - How did students perform in 420?
 - What are the assumptions about students entering 420?
 - Skill level?
 - Knowledge base?
- Analyze the program curriculum map
 - Where do students learn prerequisite skills and/or knowledge?
 - How and where are program and course learning outcomes (expectations) assessed? Are they assessed?

Using Assessment Results

- Strategic allocation/reallocation of resources
 - ▣ Make changes in curriculum, pedagogical approaches, materials, etc
 - ▣ Support improvement initiatives, strategic planning
- Accountability
 - ▣ Inform stakeholders about expectations and results
 - ▣ Improve teaching and learning on campus
- Inform policy decisions

Assessing and Improving Assessment

- Reflect on your assessment
 - ▣ Were the assessments reasonable and manageable?
 - ▣ Did they answer your questions?
 - ▣ Did they tell you something about student learning?
- Were you able to use the evidence you gathered?
 - ▣ If not, why not?
 - Are you asking the wrong questions, using the wrong instruments?
 - ▣ If yes, assess and reflect on your improvement actions
 - Did your interventions improve student learning?

One More Thing ...

- Please fill out the Workshop Evaluation Form in your folder.
 - ▣ Lisa Collins will collect the completed Evaluation Forms

Thanks!