New Techniques, New Assessment?

Assessment Strategies and Innovative Teaching Practices

Prepared by the National Center for Postsecondary Improvement: Project Area 5.3

Teaching, learning, and assessment

o **Question: How have institutions responded to calls for improvement?**

o **Prevailing views and criticisms**

- Undergraduate education is in a state of decline
- Faculty are unwilling to improve teaching
- Increased emphasis on student assessment will lead to improvements in teaching and learning

Response to calls for improvement

o Numerous disciplinary and cross-disciplinary innovations in teaching and learning have emerged

o Higher education associations, foundations, and consortia of institutions provide support

o Improvements in teaching, learning, and assessment are in various stages of evolution on campuses

Teaching and learning innovations

- Peer review of teaching
- Mathematics/Science curriculum reform
- Learning communities

- **Innovation**: Characterizes ground-up, internal processes
- **Reform**: Describes top-down, systemic, or throughout several institutions

Case study methodology ... campus selection criteria

o Teaching/learning innovations

o Ability to look at multiple innovations

o Same accreditation region with variation in state assessment policy

o Disciplines of mathematics, English, and chemistry

o Landgrant Flagship, Urban University, National University

Comparison of campuses…

o Similarities
  - Research I
  - Presence of medical, law and graduate schools
  - Tenure (research only or multiple paths)
  - Highly decentralized academic units
  - Approximately 23-24,000 undergraduates

o Differences
  - Levels of innovation (top-down or grassroots)
  - Approaches to faculty-administration divide
  - Type of admissions (flexible or selective)

Interviews and document gathering

o Interview protocols

o Document gathering before and after visits

o Contact with campus

o Selection of interviewees
  - "Change agents"
  - Faculty
  - Department chairs
  - Teaching/learning center directors
  - General education leaders

Case study materials

o Interviews with academic affairs administrators, faculty and dept. chairs, undergraduate education coordinators, and teaching and learning centers

o Web documents on undergraduate education, individual faculty, and campus initiatives

o Bulletins, guidelines, reports, assessment plans, memos, and faculty course portfolios

Landgrant Flagship

o Combined missions of landgrant university and state flagship – creates issues of identity

o Leadership focus on plans for undergraduate education; conversations about coursework "rigor" are prevalent

o Traditional and new assessment techniques simultaneously informing debate

o Faculty develop an active interdisciplinary community focused on the scholarship of teaching

Landgrant Flagship (cont.)

o Vice Chancellor initiative awards tenure with more flexible teaching/research ratios

o Accreditation and academic program review drives development of dept. plans for student assessment

o Improvement initiatives precede the coordination of student assessment

Urban University

o A large urban campus with multiple missions to the local community (both to students and to businesses)

o "Top down" initiatives relating to assessment and teaching/learning improvements, but success dependent on faculty ownership

o Central administration coordinates all levels of assessment activity on campus

o Institution garners recognition for innovation

o Improvement initiatives and assessment activity not converging at the individual faculty level

o Flexible promotion and tenure system

National University

o Institutional prestige motivates innovation in teaching/learning activity

o Faculty leadership involved with departmental changes regarding teaching/learning

o Uncoordinated assessment activity, no central oversight or attention

o No academic program review process

o Upcoming accreditation visit may provide impetus for more emphasis on assessment

o Tenure granted on 40-40-20 model

Multiple ways of knowing what students are learning

o English
- Class discussions
- Placement tests combined with other assessment techniques

o Mathematics/Chemistry
- Exams
- Added vehicles for communicating
  - Papers and group projects
  - Short presentations
  - "Front row duty"
  - Emphasis on communication skills

Are assessment and grading different?

"[Communication with students] is assessment in the broad sense. It's not assessment in the sense of a course grade. . . . I'm not talking about enumerating things that go into the course grade. But – and I do some assessment, I mean just talking to the students, you get a sense of where they're at, who's more advanced, who's not, but, so the one minute papers and the background knowledge probe are certainly broader assessment practices…"

Are assessment and grading different? (cont.)

"…But by and large, I mean, you know, the bulk of the grading, if you want to think of assessment as grading, the bulk of the grading is done still on our exams but I've broadened it out, and sort of tempered it somewhat with other things including the writing and the presentations and you know, homework and stuff like that…"

– Landgrant Flagship, Math

Perceptions that assessment unfairly or prematurely judges

Does assessment = judging?

"I was not as anxious to put assessment into [learning communities] this year. I think sometimes if people feel you're judging right away, that it's not good, and I also know that we want to involve [staff members]."

– Landgrant Flagship, General Education

Perceptions about assessment (continued)

Do grades unfairly label students?

"I don't believe in grades', some [faculty] have said. 'My classes are so process oriented that students have the chance to keep working on whatever it is until they raise their grades high enough. I give them huge amounts of feedback and they will just implement the feedback and its impossible for them <u>not</u> to get good grades.' 'The focus of the class is so personal, that how can you grade people down for expressing their opinions about their own lives?"

– Landgrant Flagship, English

Questions about student learning

o **During college**

- Does class performance improve?
- Is post test score well above pre test score?
- Does student enroll in subsequent or related classes?
- How do students perform in subsequent or related classes?

o **After graduation**

- Do students develop technology and communication skills?
- Do graduates get jobs?
- Are companies happy with graduates' skills?
- Do our students' scores compare well with other institutions?

Gathering evidence of student learning

o **English**
  - Portfolios
    - Student portfolios
    - Course portfolios
    - Teaching portfolios
  - Issues
    - Representative or best students
    - One polished product or many drafts
  - Student learning at center of discussions on portfolios and teacher assessment

o **Math/Chemistry**
  - Different use of exams
    - Pre and post tests
    - Aggregated results of class performance
    - Dept.-wide finals with comparison across sections
  - Issues
    - Is score comparison across classes used to identify student skill levels or to punish faculty?

Evidence of student learning becomes relevant at multiple levels

o Student Assessment

o Teaching Assessment

o Program Assessment
- Within Major
- Service Courses

o Institutional Status
- Accreditation
- Reputation

o Post-Graduation
- Response to Employer Demand
- Alumni Satisfaction

Math: Different attitudes

o **Innovation as usual**
- Sense of responsibility to other departments
- Strong sense of departmental cohesion
- Interest in student opinions

o **Innovations as prestigious**
- Sense of leading a discipline
- Sense of institutional status tied to new teaching practices

o **Resistance and turf issues**
- Faculty feel dictated to by upper administration and pedagogical experts
- Lots of departmental turf issues
- Endurance of underprepared students

Chemistry:
Making practical connections

o Practical implications of course material made more explicit

o Surviving large lecture classes

o Using space, technology and staff to create community: Landgrant Flagship's Chemistry Resource Center

English: A case in resistance & change

o Endemic resistance: Faculty equate assessment with anti-intellectualism

o Conversions in practice

o General shift: Faculty are more willing to present student-learning goals overtly in courses

Overarching Themes …
Patterns of resistance

o Resentment of other departments: Suspicion that service-course faculty innovate at the expense of student preparation

o "Assessment" & the Buzzword Effect - a lack of interaction between micro- and macro- levels of assessment?

Patterns of community building

Develop an appreciation for others' teaching

"One of the things I enjoyed about the peer review project (is) probably the increased amount of time I've spent talking to people outside my field about teaching . . . I've come to understand how faculty are different in many ways."

– Urban University, English

Patterns of community building (continued)

Establish relationships built around teaching

"If you've worked with Teaching/Learning centers like that you realize that there soon turns to be a kind of a group of faculty that many of them show up to many other things, and so you end up over the long haul seeing a lot of people, I suppose 50 percent of the people are kind of regulars at this."

– Landgrant Flagship, Math

Patterns of recommitment: Lessons from senior faculty

Teaching innovation can reinvigorate career

"I had a burnout experience and so that is what I reckon paved the way for my readiness for this experience. There's nothing like a trauma to shake things up in a hurry." – Landgrant Flagship, English

Increased investment in institution

"I'm much more ready to invest in the institution. Its clear that I'm going to be here, and teaching is something which is a benefit primarily or at least at first glance to the institution." – Urban University, English

Lessons from senior faculty (continued)

Ability to risk and try new things

"One of [my colleagues] said 'why don't you take part of the teaching journal and give it to the students and ask for a response?' And I did, and it became part of my teaching portfolio that I made."

– Landgrant Flagship, English

Lessons: Classroom assessment & teaching improvement

o Explicit goals for student learning

o An emphasis on written communication of concepts

o Other tensions/constraints:
- Pace: Content vs. Understanding
- Resistance to overt goals and assessment
- Faculty empowerment to assess student learning

How is improvement linked with assessment of student learning?

o Assessment as information-gathering
  ▪ Assessment as impetus for innovation: uncovers a problem and points to possible remedies
  ▪ Innovation as impetus for assessment:
    • Provides feedback
    • Enhances faculty & student engagement
    • Reinforces motivation for teaching improvement

o A link between teaching improvement and assessment improvement
    • Traditional markers may overlook emerging dimensions of student learning

What types of institutional structures encourage improvement?

o **Flexible promotion/tenure processes**
  - Separate tracks: research, teaching, service, balanced case
  - Flexible percentage weighting in review process: teaching, research, service

o **Teaching/Learning Centers can facilitate faculty ownership in teaching improvement**

Institutional structures… (continued)

o Opportunity for interdisciplinary dialogue about teaching

o Pressures from accreditation and program review

Cross-case comparisons

o National initiatives link faculty into networks across campuses - (e.g. external evaluation of teaching)

o Development of faculty expertise when it comes to student learning/assessment - knowledge about practice

o Highly decentralized environments, a strong central vision and faculty leadership in depts. are important to create change

Assessment of student learning occurring at multiple levels

o **Classroom level**
  - "It's not all high-science!"

o **Departmental level**
  - Across sections

o **Interdepartmental expectations**
  - Service course dynamics

o **Administrative/Formal levels**
  - Faculty performance: Promotion/Tenure
  - Program review
  - Institutional accreditation

Recommendation:
Link assessment and improve teaching

o Build on faculty interest in the scholarship of teaching

o Revise tenure and promotion policies to reward teaching innovations and collection of evidence of student learning

o Coordinate the multiple levels of assessment activity to create a coherent portrait of how the campus is "making a difference"

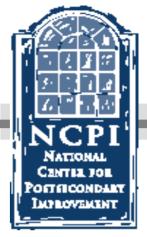o Ecological model linking assessment and improvement

Institutional research implications

o Participate at the initial stage in assisting innovations to develop useful assessments

o Keep communication lines open regarding innovative activities on campus

o Involvement may require evaluation of standard educational practices as well as innovative practice

o Coordinate the involvement of more individuals in assessment as the results of the innovations appeal to a broader audience

Research challenges

o Entry: who grants it determines what interviewees say
o Avoiding perception of participating in a specific campus agenda
o Sense of one campus more "poking and prodding"
o Getting faculty to open up when they want to know our position on various contentious issues
o Fitting into the faculty schedule
o Logistics
o Cost

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