A Review of Teaching, Learning, and Assessment Practices in Higher Education

Prepared by the National Center for Postsecondary Improvement: Project 5.3
Views and Criticisms

Question: How have institutions responded to calls for improvement?

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 teaching and learning improvement
Current Reform and Innovation Efforts

- Active learning
- Collaborative learning
- Cooperative education
- Critical thinking
- Cultural pluralism
- Examination reform
- Faculty peer review
- First year seminar
- General education
- International education
- K-16
- Learning communities
- New Wave calculus
- Science reforms
- Service learning
- Student peer teaching
- Standards
- Technology
- Undergraduate research
- Writing across the curriculum
Case Studies used to Document Current Trends

- Three innovations selected for study
  - Peer review of teaching, calculus reform, learning communities

- Three institutions selected for study
  - High levels of innovation, similar accreditation, research universities
Patterns identified from Case Study Research

- National initiatives link faculty into networks across campuses
- On-campus efforts develop faculty expertise related to student learning and assessment
- Highly decentralized environments, a strong central vision, and faculty leadership within departments are important elements of the change process
Key Issues across Campuses

**During college**
- Are improvements in class performance evident?
- Do post-test scores reflect improvement over pre-test scores?
- Do students enroll in subsequent or related classes?
- How do students perform in subsequent or related classes?

**After graduation**
- Do students develop technology and communication skills?
- Do graduates get jobs?
- Are companies happy with graduates’ skills?
- Do students’ scores at this institution compare favorably with other institutions?
Assessment Practices/Issues across Academic Disciplines

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

- **Math/Chemistry**
  - **Exams used in different ways**
    - Pre and post tests
    - Aggregated results of class performance
    - Department-wide finals with comparison across sections
  - **Issues**
    - Are score comparisons across classes used to determine students’ skill levels, or to punish faculty?
Structures that Encourage Teaching Improvement

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

- Teaching/learning centers that encourage faculty ownership of teaching improvement

- Opportunity for interdisciplinary dialogue about teaching

- Pressures from accreditation and program review
Overview of Responses to the Call for Improved Teaching

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

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

- Improvements in teaching, learning, and assessment are in various stages of evolution on college and university campuses
Methods to Consider when Examining Current Practices

- Create faculty and student surveys to examine current practices
- Use interview protocols to expand upon survey findings
- Conduct case studies, or compare findings to case studies conducted by others
Use of Multiple Measures to Study Current Practices

- Interview academic administrators, faculty and department chairs, undergraduate education coordinators, and teaching/learning center staff

- Review documents related to undergraduate education, individual faculty, and recent teaching, learning and assessment initiatives
  - Bulletins, guidelines, reports, assessment plans, memoranda, and course portfolios
Use of Multiple Measures to Document Student Learning

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

- Mathematics/Chemistry
  - Examinations
  - Communicating what has been learned
    - Papers and group projects
    - Short presentations
    - “Front row duty”
    - Emphasis on communication skills
Creating Linkages between Learning and Assessment

- **Assessment as impetus for innovation:**
  - Uncovers a problem and points to possible remedies

- **Innovation as impetus for assessment:**
  - Provides feedback about a particular innovation
  - Enhances faculty and student engagement in the learning process
  - Reinforces motivation for teaching improvement

- **Link teaching and assessment improvement**
  - Traditional markers may overlook emerging dimensions of student learning
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