

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

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# 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

- o Three innovations selected for study
  - Peer review of teaching, calculus reform, learning communities
- o Three institutions selected for study
  - High levels of innovation, similar accreditation, research universities

# Patterns identified from Case Study Research

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

# Key Issues across Campuses

## o **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?

## o **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

## o 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

## o 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

- 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 that encourage faculty ownership of teaching improvement
- o Opportunity for interdisciplinary dialogue about teaching
- o Pressures from accreditation and program review



# Overview of Responses to the Call for Improved Teaching

- 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 college and university campuses

# Methods to Consider when Examining Current Practices

- o Create faculty and student surveys to examine current practices
- o Use interview protocols to expand upon survey findings
- o Conduct case studies, or compare findings to case studies conducted by others

# Use of Multiple Measures to Study Current Practices

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

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

- o Assessment as impetus for innovation:
  - Uncovers a problem and points to possible remedies
- o 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
- o Link teaching and assessment improvement
  - Traditional markers may overlook emerging dimensions of student learning



# National Center for Postsecondary Improvement

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