Technology for Learning’s Sake

Effective Practices in IT for Teaching and Learning

Introduction

- Put technology in broader context
- Provide some perspective
- Introduce how technologies can be used “for learning’s sake”

Overview

Cognitive science

- Learning is a social activity
- Learning occurs best when learning is active
- New knowledge builds on prior knowledge
- Learning occurs best a “point of need”
From Instruction to Learning

<table>
<thead>
<tr>
<th>Instruction Paradigm</th>
<th>Learning Paradigm</th>
</tr>
</thead>
<tbody>
<tr>
<td>College provides instruction for students</td>
<td>College produces learning in students</td>
</tr>
<tr>
<td>Department: discipline; isolated knowledge</td>
<td>Cooperatives cross disciplinary lines</td>
</tr>
<tr>
<td>Focus is on the professor; &quot;sage on the stage&quot;</td>
<td>Focus is on learning; &quot;guide by the side&quot;</td>
</tr>
<tr>
<td>Lecture primary form of delivering instruction</td>
<td>Lecture plus new active learning strategies</td>
</tr>
<tr>
<td>Learning is responsibility of the student</td>
<td>Everyone is responsible for learning</td>
</tr>
<tr>
<td>Meaningful assessment at conclusion of course</td>
<td>Meaningful assessment takes place constantly</td>
</tr>
</tbody>
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Adapted from Barr & Tagg (1995), “From Teaching to Learning”

Information Technologies

- Computers + Telecommunications
- Promotes the use of instructional design
- Makes learning possible “any time, any where”

From Instruction to Learning

- Opportunities for investigation and practice
- Student as researcher
- Learning in community of learners
- Peer-to-peer communication
- Learning guided and monitored with lots of feedback

Information Technologies

- Plater (1995): “The most basic and fundamental unit of academic life . . . is about to be turned inside out.”
- Flynn (n.d.): “. . . the classroom has lost its place of primacy . . . .”
Today’s students are “unabashed vocationalists” (McClenny, 1998, para. 5).

William Gibbs, President, University of Phoenix:
- “Our students don’t really want the education. They want what the education provides for them.”

National Survey of 15-17 year-olds
- “A college degree is necessary for career success.”
Unabashed vocationalists

**Objective:**
- Philosophy of life
- Increasing earning power

Clash of expectations

- Faculty
  - Abstract & theoretical
- Students
  - Concrete & practical
  - Passive learning
  - Active learning

Knowing our students

- Students as consumers
- Future of career changes
- Demographic changes

New competition

- Corporate Universities
  - 1,000 industry-based “universities”
  - Arthur Anderson’s education budget is comparable to the University of Virginia and larger than Syracuse University
  - Serve 41-percent of the workforce
New competition

- Non-profit distance education

- Commercial ventures

- Many of the offerings are targeted to the expanding non-traditional student market
- But opens up delivery to “any one, anytime, any where”
- Build it yourself education

- Courses being created by teams
- For-profits budgeting $80,000 per instructional hour for development
- Schools will have to collaborate
- Can course developed by single faculty member compete?
New competition

- U.S. Dept. of Education: Get past faculty tradition of “distinctive syllabi and teaching materials.”
- Winston (1998): Will lead to break with “emulated traditions” such as “full-time tenured faculty, faculty governance and curricular freedom” (p. 22).

New competition

- For-profits will “skim the cream”
- Partnering means high “brand name” value
- Take students away from the high-demand courses that subsidize low-demand courses

New competition

- Marchese (1998): “[A]ll institutions, Ivies and medallions included, may see their undergraduate franchise eroded as enrolled students appear in the registrar’s office with brand-name course credits taken over the Web” (cited by Winston, 1998, p. 18).

New competition

- George C. Winston’s analysis
  - Institutions with lowest subsidy of tuition are the most vulnerable
  - Includes 58-percent of private comprehensive colleges & universities
  - Especially vulnerable in their “practical, concrete, occupational-vocational curricula”

“For-Profit Higher Education: Godzilla or Chicken Little?” (November 1998)
How do we survive?

- Importance of mission
- Built to Last:
  - Understand your core values which are unchangeable
  - Use your power to stimulate progress

How do we survive?

- Griffiths & Gatien (1999): “The research universities that will flourish in the face of the distance education onslaught will take the best of their activities and traditions, build upon their strengths, and grow from there” (para. 7).

How do we survive?

- Have to explicitly relate our mission to:
  - learning
  - for today’s students
  - using technologies as appropriate
What role for technology?

- No “technological fix”
- Some “effective practices” are emerging which can help transform the classroom

Scholarship of Discovery
- Students and faculty as researchers together
- Wealth of source material & raw data available
- “Learn how to learn”

Based on Boyer (1990), Scholarship Reconsidered

What role for technology?

- Scholarship of Application
  - These students will live in a “virtual world”
  - The Web will increasingly be the place for connection to society
  - Strategy for dealing with social & ethical issues

Based on Boyer (1990), Scholarship Reconsidered

What role for technology?

- Scholarship of Integration
  - Move beyond disciplinary boundaries
  - Communicate with colleagues in other fields
  - Discover patterns that connect
  - Broader implication for “faith, life and learning”

Based on Boyer (1990), Scholarship Reconsidered
What role for technology?

- Scholarship of Teaching
  - Support classroom presentations
  - Open up opportunities for active learning
  - Support collaborative learning

Based on Boyer (1990), Scholarship Reconsidered

Conclusion

- Tremendous change coming
- Cedarville College as a “Contradictory College”
- Important that all work together