What Would Socrates Say?

An Enlightened Look at Technology’s Role in Learning

Marie Cini, Ph. D.
Critical Questions to Explore

• What is Technology?
• What is Learning?
• What is the Faculty Role in Learning?
• How Can Technology Aid Learning?
• What are the Impediments We Face?
• What Can We Do Now?
What is Technology?

<table>
<thead>
<tr>
<th>Concept</th>
<th>Tool</th>
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<tbody>
<tr>
<td>• The application of scientific knowledge for practical purposes</td>
<td>• Machinery and equipment developed from such scientific knowledge</td>
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<tr>
<td>• The use of knowledge and resources to solve problems and extend human capabilities</td>
<td>• Can be tools, resources, or systems</td>
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<td></td>
<td>• May be simple: the stirrup attached to a saddle; or complex: a computer</td>
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http://www.techmotivator.iitm.ac.in/Definitions.htm
What is Learning?

<table>
<thead>
<tr>
<th>20th Century</th>
<th>21st Century</th>
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<tbody>
<tr>
<td>Pedagogy based on tradition</td>
<td>Pedagogy based on learning science</td>
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<td>Learners as empty vessel</td>
<td>Learners come with variety of abilities</td>
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<tr>
<td>Passive role of learner</td>
<td>Active role of learner</td>
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<td>Memorization as learning</td>
<td>Application, analysis and synthesis as learning</td>
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<tr>
<td>Recall as assessment</td>
<td>Demonstration as assessment</td>
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<td>Place and time-bound</td>
<td>Few boundaries on learning</td>
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What is the Faculty Role in Learning?

• Directing this?
What is the Faculty Role...?

- Or facilitating this?

http://juliecollareda.wikispaces.com
Faculty Role

- Or a Combination?

- Our Best Faculty Are Probably a Combination of Both: Excellent Teachers Who Continue to Improve Student Learning through Evidence-Based Approaches

- We have a Mechanism for this: Learning Outcomes Assessment
How Can Technology Aid Learning?

- 1. As an approach to solving a problem
- 2. As a solution to a problem
- 3. As a catalyst for creative thinking
Technology: Approach to PS

What is the problem?

- Costs Rising
- Student Learning Stagnant
- Completion Stagnant
Technology: Approach to PS

• How do we use our knowledge, resources, and systems to
  ▫ Decrease costs
  ▫ Increase learning
  ▫ Increase completion
Technology: Tools as Solutions

- What technologies help our learners to
  - Learn more effectively?
  - Complete degrees more efficiently?
Technology: More is Not Always Better
Technology: Catalyst for Creativity
Impediments We Face

• Fear
• Tradition
• Rapid Changes
• Need to Change Skills
• Technology in Early Stages
• Time
What Can We Do Now?

- Help stakeholders face realities
- Create a clear rationale for technology
- Develop partnerships and collaborations
- Develop and sustain transparency and trust
- Develop strong champions for change
- Communicate, communicate, communicate
- Develop clear processes for involvement, change, and feedback

Thanks to Dr. Chris Sax
One Idea to Drive Technology

- Create a collaborative unit to pilot and assess new technologies
- UMUC: Center for Innovation in Learning
  - Piloting and Assessing New Pedagogies, Technologies, Curricula
  - Focus On the Learning
  - Faculty are collaborators, learners, evaluators, implementers, and heroes
What Would Socrates Say?

- Perhaps the following:
- In Plato’s version, Socrates would admit that he knows very little
- But would question through dialogue to get to deeper mutual learning
Thank You...

• And now for the hemlock....