# What Would Socrates Say?

An Enlightened Look at
Technology's Role in Learning

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# 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?

| Concept |
|---|
| • The application of scientific knowledge for practical purposes |
| • The use of knowledge and resources to solve problems and extend human capabilities |

| Tool |
|---|
| • Machinery and equipment developed from such scientific knowledge |
| • Can be tools, resources, or systems |
| • May be simple: the stirrup attached to a saddle; or complex: a computer |

http://www.techmotivator.iitm.ac.in/Definitions.htm

# What is Learning?

| 20th Century | 21st Century |
|---|---|
| • Pedagogy based on tradition<br>• Learners as empty vessel<br>• Passive role of learner<br>• Memorization as learning<br>• Recall as assessment<br>• Place and time-bound | • Pedagogy based on learning science<br>• Learners come with variety of abilities<br>• Active role of learner<br>• Application, analysis and synthesis as learning<br>• Demonstration as assessment<br>• Few boundaries on learning |

# What is the Faculty Role in Learning?

- Directing this?

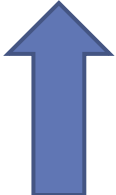# What is the Faculty Role...?

- Or facilitating this?



**Email**

**SMS**

**myProjects**

**Internet access**

**Portal access**

**Learning management system/s**

**Web conferencing**

**Social bookmarking e.g. Del.icio.us.**

**My personalised learning environment**

**Learning reference repository**

**RSS aggregator**

**Online diary/comment e.g. blog**

**Collaborative tools e.g. wiki**

**Photosharing e.g. Flickr**

**Institute Intranet**

**Podcasting**

**Videocasting**

**Virtual worlds**

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**
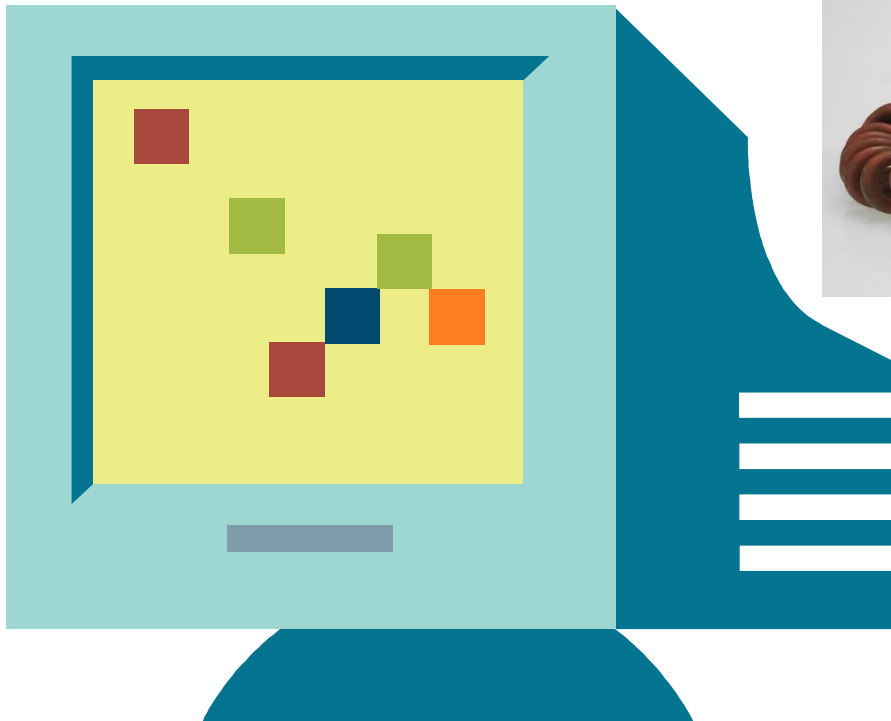
  - **Increase learning**

  - **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....