The Move to Online: 
Transmission or Transformation?

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If Online Education is the Answer, 
What is the Question??

• What is your goal? 
  – What is the motivation driving your interest in online learning? 
  – What needs, opportunities, and constraints are part of the puzzle?

• Online education can be a means, but is not itself an end

• Let your end be a vision worth your university’s very best people and efforts
Going Online: A Typical Scenario

• Starts with a desire to increase institution’s revenues
• Instructors understandably want a model that requires as little change as possible to their teaching practices
• Goal is to have online courses be “as good as existing on-campus courses”

• The result
  – Record and stream existing lecture-based courses
  – More of the same

• What’s wrong with that?

Is “As good as classroom instruction” an Adequate Goal?

• Going online can remove/reduce barriers to education
  – Who learns
  – Who teaches
  – When teaching and learning happen
  – How teaching and learning happen

• Done well, online education practices can improve classroom practices

• Can be a game-changer for colleges and departments
How do you envision online learning?

• A digital file cabinet
  – Digitize and post existing documents

How do you envision online learning?

• A one-way hose for streaming course recordings and related content
  – Students are receivers of content with little/no meaningful engagement with other students and faculty
How do you envision online learning?

• An opportunity to create a new learning space
  - collaborative
  - engaging
  - authentic
  - new freedom in where, when, and how learning occurs

Use “the Move to Online” to Transform Engineering Education

• Decide to use your initiatives in distance education as strategic opportunities to make major advances in the nature, quality, and impact of education at your institution.

• Decide (really decide) to make meeting the needs of students as the #1 priority.

• Engage experienced, capable instructional designers in the design of programs and each course.
Use “the Move to Online” to Transform Engineering Education

• **Effectively support faculty** throughout course development, delivery, evaluation, and improvement.

• Use online formats and tools to **build effective, meaningful community** in support of learning.

• **Integrate learning and professional practice** as part of coursework.

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Using “the Move to Online” to Transform Engineering Education

• **Use what you learn and new learning assets for online courses** to **improve all courses**

• **Build new and deeper connections** between your faculty’s research and industry.
Some Practical Advice

• **Help faculty** understand **possibilities** and their **impacts** on student learning

• Use **group projects** in online courses to develop skills needed to **lead and contribute to globally distributed teams**

• Thoughtfully complement asynchronous learning with **live, authentic interactions** (e.g., interactive web conferences)

• **Have students contribute meaningfully** to online learning
  – Lead web conference presentations
  – Lead asynchronous discussion forums

Some Practical Advice

• **Provide free access to tools that enable student groups** to meet and work effectively anytime, anywhere
  – Project groups
  – Study sessions, etc.

• Use online tools to **engage alumni** in networking, learning, and teaching

• **Engage the best** faculty, speakers, and resources, **wherever they are**
Re-Creating Engineering Education

• Create a vision worthy of your faculty

• Create a path and stepping stones to get there

• “You must be the change you wish to see in the world”
  – Mohandas Gandhi

• “There is no passion to be found playing small – in settling for a life that is less than the one you are capable of living.”
  – Nelson Mandela