



MAGNA ONLINE SEMINARS

Supplemental Materials

Finding the Right Technology to Support Learning Outcomes

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Ike became involved in blended learning as part of an 18-month project to completely redesign the general chemistry course at Berks. As part of a team of six professionals who invested over 1,000 man-hours in the redesign Ike helped provide the pedagogical and subject matter expertise to help guide the redesign. The course has now been delivered in a blended format for three years with an average GPA almost 25% higher than previous years. Ike has taught the three sections of the course and is currently co-authoring a manuscript about the results. Ike recently redesigned a nutrition course that was taught in a blended format that met only half the number of hours of a traditional course with comparable grades. He has presented his work on blended learning at numerous professional conferences and has become an advocate of blended learning.



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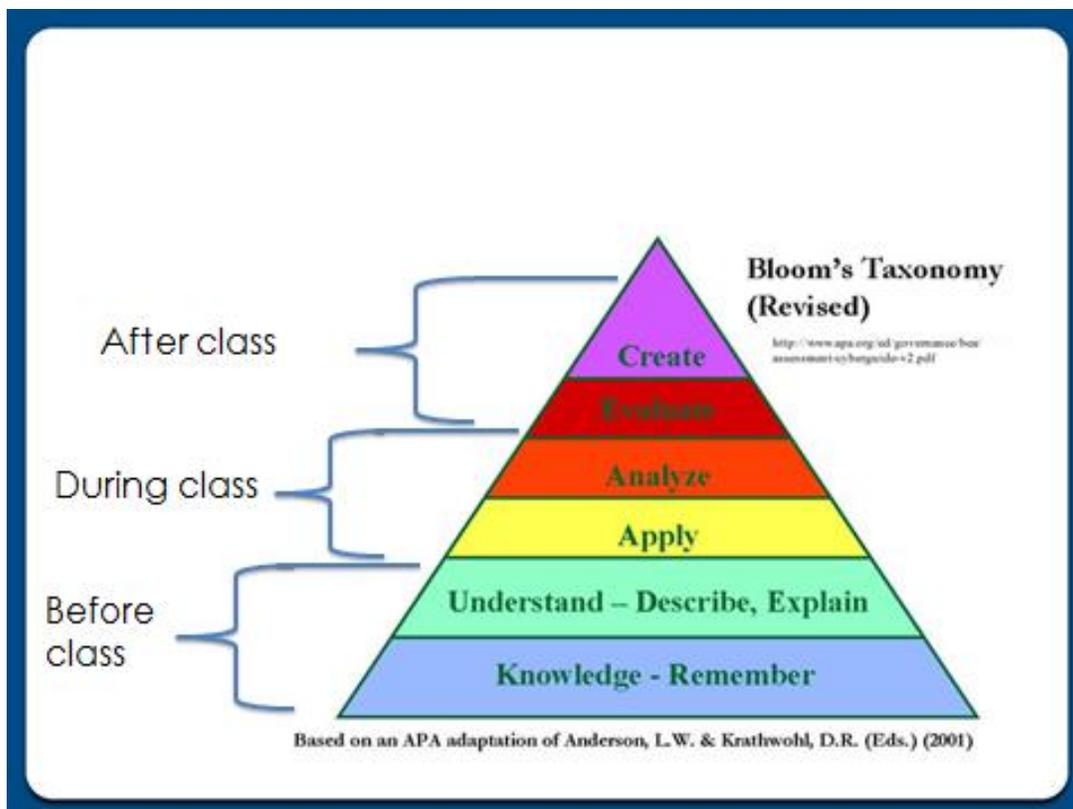
Finding the Right Technology

When should I use technology?

Technology before class can be at the lowest levels of Bloom's Taxonomy. The goal is often to ensure that students interact with knowledge prior to F2F time. Focus on multiple-choice quizzes, straightforward homework, and reflections about reading.

Technology during class should be aimed at the middle of Bloom's Taxonomy. Choose engaging technology such as clickers. F2F time should be utilized to help students apply information rather than learning it for the first time.

Technology after class should be focused on critical thinking at the highest levels of Bloom's Taxonomy. Web assignments can be created such as critical evaluations of information on the web, creation of new information such as a Wiki, and blogging. Writing should be emphasized reminding students about plagiarism. Drop boxes allow writing to be submitted electronically.



Technology Tools for the Classroom

Office	Word PowerPoint Excel
CMS	ANGEL Blackboard Soft Chalk
Clickers	i>clicker Turning Point Poll Everywhere Top Hat Monocle
Presentation/Screen Capture	Camtasia SnagIt Jing
Recording	Podcasts/Vodcasts Audacity
Communicating	Skype E-mail Twitter Telephone iChat
Reports	Google Docs Wikis ePortfolio
Synchronous Learning	Elluminate Live/Wimba Adobe Connect Wiifiti
White Board	SmartBoard SmartPodium
Videos	YouTube TED Talks iMovie

Tablet PC	iPad IBM
Social Media	Facebook Ning Linked In
Lab Software	Vernier BioPack
Textbooks	Homework Online textbook A & P Revealed
Information	RSS Wikipedia Digg
Collaborating	iJot VoiceThread Blogs (moonfruit, pbworks, weebly, blogspot) Chat Rooms
Lecture Capture	Echo 360
Social Bookmarking	Diigo
Connectivity	vBrick LAN ustream
Pictures	Picnik Flickr
Advanced	Flash Second Life

Choosing Technology

1. Establish learning goals and objectives
2. Choose a goal
3. Match technology with the goal (<http://www.go2web20.net/>)
4. Explore different types of technology

Learning Objective	Technology Category	Technology	Assignment
<i>Ex. Students will critically evaluate nutritional advice given by mainstream media</i>	<i>Report</i>	<i>Wiki</i>	<i>Select a topic and present an analysis via a Wiki</i>

Questions to Ask When Trying to Decide Whether Technology Can Improve a Course

- Can I use technology to help students prepare for class?
- Can I use technology to engage students during class?
- Can I use technology to help students rehearse content after class?
- Will technology additions help students meet the specified learning outcomes for a course? If so, which ones?
- How will I fuse the technology with F2F time to make the course seamless?
- How can I leverage technology to make grading less time consuming?
- How much technology will students need to learn, i.e., what's the student learning curve?
- How much technology will I need to learn, i.e., what's my learning curve?
- How much will the technology cost the student?
- How much will the technology cost the institution?
- Am I trying too hard to fit technology into my course (square peg/round hole problem)?
- If students do more work prior to class how can I utilize class time differently?
- When students do work outside of class how can I minimize the temptation to cheat?
- How can I utilize technology to make some class sessions online (synchronous online learning)?
- How can I utilize technology to help remedial students: think of ways to allow students to continue to practice until they have mastered a concept?
- How can I utilize technology to help challenge students: think of ways to allow creativity that will enhance student learning?
- Can technology help create alternative assignments: a smorgasbord/learning contract approach?
- Does the technology seem like it would motivate students?
- Does the technology seem like it would allow students to individualize their learning?

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