

Teaching with Technology
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“The Internet provides an ideal learning environment that allows people to refine understanding and build new knowledge, and to visualize difficult concepts, employ inventive thinking, effective communication and teamwork.”

CEO Forum, “Key Building Blocks for Student Achievement in the 21st Century.*

Just as technology has transformed corporate America, so it is also making inroads at all levels of education. How fast or slowly you move into the future of the “wired” classroom depends on many factors -- some related to your experiences with media, some to your personal teaching style and some to the circumstances on your campus. Overall, teachers surveyed in Y2002 by Butler and Sellbom¹ on campuses nationwide identified themselves as approximately 70% “adopters” of some technology, about 15% as “early adopters” and another 15 % as “laggards.” (Recognize the “Bell-shaped curve?”)

What has emerged from this and other similar studies reported in the literature is that faculty members (*whether or not they are media-proficient*) have three important questions that are barriers keeping them from making even wider user of technology. These are:

- Does the use of technology *really* improve learning?
- Can using technology become less of a hassle and more reliable?
- Where can I find the time to learn to use the technology?

CONSIDER

Where you were when the earth shook and the great paradigm shift of this century took place? When computers became a part of our lives, were you not yet born? in grade school ? in high school? college? a beginning teacher? experienced professor?

Does your answer affect how you see the role that technology can/should play in your teaching?

New Designs for Learning*

Technology helps students to:

- Research specific topics.
- Communicate with faculty and classmates via e-mail.
- Collaborate in group activities.
- Process data and report results in databases, spreadsheets etc.
- Use a variety of media and formats to communicate with classmates.
- Complete self-directed projects and report on results.
- Build connections among various fields of learning.
- Use higher order thinking skills regularly.
- Find alternative learning processes suited to their individual learning styles.
- Share multi-media experiences with other learners.

Web Resource



*U.S Department of Education,
Preparing Teachers to Use Technology,
www.pt3.org

Is Technology Worth the Trouble?

Given the patience and energy required to make use of technology on our crowded campuses, the question of whether or not electronic media is essential for today's students is a huge one. Convincing data from credible research is hard to locate. There are few well-run studies documenting which technologies might make an impact on learning and teaching. In addition, more documentation is needed to determine to what degree the technological capabilities of the student matters for learning to occur. Several credible groups, including the **US Department of Education** at its PT3 site (*Preparing Tomorrow's Teachers to Use Technology*), are reporting new studies.



http://www.pt3.org/technology/tech_learning.html

The International Society of Technology in Education (ISTE) has prepared the following summary of its recent research showing the relative impact of technology on learning and teaching.

ISTE's New Learning Environments¹

Traditional Environments	New Learning Environments
Teacher-centered instruction	Student-centered learning
Single-sense stimulation	Multisensory stimulation
Single-path progression	Multipath progression
Single media	Multimedia
Isolated work	Collaborative work
Information delivery	Information exchange
Passive learning	Active /inquiry-based learning
Knowledge-based learning	Critical thinking
Reactive response	Proactive planned action
Isolated, artificial context	Authentic, real world context

¹www.iste.org



“One Step at a Time”

How May We Help You?

CONFER

Is help available for any professor on your campus who wishes to move ahead in making technology a part of the classroom?

Using the Campus Network

- o Requesting a password
- o Setting up for e-mailing
- o Using the library catalogue
- o Logging on to the network
- o Copy, rename, delete files
- o Resize windows
- o Set up separate files for classes
- o Send files with attachments
- o Other

Applications

- o Create a simple web page
- o Create a PowerPoint document
- o Scan and import an image
- o Work with graphics
- o Other

WWW

- o Access a specific web site
- o Follow a URL
- o Locate and use search engines
- o Set up and use bookmarks
- o Download
- o Other

Troubleshooting

- o Correct a locked up computer
- o Find “lost” files
- o Install software updates
- o Uninstall software
- o Recover “deletes”
- o Other

Peripherals

- o Import from a digital camera
- o Scan /import slides
- o Convert VCR to digital
- o Other

Help is available to master new skills. You need only ask.

Though data collection and reporting often runs as much as two years behind, it is clear that colleges everywhere are experiencing significant growth in the seamless integration of technology into their classrooms. College presidents site this increase as one of their critical success factors for the coming years. Funds have been made available for more hardware, software and (most important) more support staff.

AMP-0200

Considering the resources in people and equipment that are available on your campus, are you encouraged to move forward towards integrating technology into your programs?

Communications - Email

For busy, mobile faculty, having an effective way to be available to students is daunting. With the accessibility of e-mail, any faculty who can get to a computer can set up a virtual office. From your computer, you can answer questions, clarify concepts, add assignments, announce quizzes, and generally stay in-touch with your groups. A phone call to the technology Help Line on your campus can set up your e-mail account allowing you to organize files for individual students, address books, and group mail. Students also have access to off-campus free e-mail accounts and should be encouraged to use them.

Faculty who use e-mail between classes report that shy students or those from diverse backgrounds enjoy using e-mail to communicate. It can be a chance for you to form deeper relationships with students than is possible in the classroom. E-mail is a very helpful technology, but it has spawned its own problems. Students need to be alerted that the e-language that has emerged in “Instant Messaging” (IM) is not acceptable for college work.

Topics for Discussion

on



Do you believe that where you were in your life path at the time that computers came of age affects how you see the role computers can play in your teaching? Please prepare to explain on WebCT.

Please prepare to share on WebCT the web site in this unit that you found most helpful.

WEB LINKS



<http://www.kent.edu>

<http://www.kathyschrock.net/>

<http://www.iste.org>

<http://www.apple.com/education>