Conversations on Technology
Other comments...

prepared for

The Institute on Learning Technology

part of the

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This conversation also is available from the Learning Through Technology web site,
http://www.wcer.wisc.edu/nise/cl1/lt/
Ending Comments #10:
"We would also appreciate it if you could briefly describe how you use technology in your instruction, if its not obvious from your answers above. This will provide context for your answers."

I have mostly used email and machine produced lectures. I am planning distance learning experiments. I have investigated, but not yet used interactive web site based teaching for graduate courses. I am in the process of producing CD-ROM based videos for student to watch at home for self-paced learning.

I am a technophobe myself. The calculus example above is taught by a colleague. I have used Devaney's web site and it is idiot proof. We need more of those. More advanced students sometimes do projects, but they choose which software they wish to use and figure it out for themselves. Slightly older students respond OK to the idea of a "learning community" in which the instructor is not omniscient. As long as I don't have to be omniscient I don't mind working with students who are using technology.

I and Professor A are teaching 310 (taken by all ME, ChE, and CEE students). We are eliminating the large passive lectures and replacing them with streaming video web-based lectures delivered with eTEACH®, a software product developed under NSF sponsorship. The lectures will be replaced with a skills lab session and a problem solving lab session where students work in teams. The College of Engineering is developing a computer equipped studio classroom for the problem solving lab. This will be taught for the first time in this format in Fall 2000.

I use demos in class (CD ROMs), graphing calculators with cbls experiments and analysis of experiments, e-mail communication and have students obtain information from internet.
I teach a course in Written Business Communication, entirely on the Web with e-mail interface.

Well I must admit my hands are tired of typing. I used technology in general chemistry to present PowerPoint® lectures. This took about 1/3 of each class time. I used CD animations from the JCE (Journal of Chemical Education) CD's I purchased. I used WebCT to post student grades for the entire semester for all sections of the course. Students did electronic homework with the ChemSkill Builder® software. That was very successful to promote learning and compliance with homework. The students used Excel® in lab and my colleague wrote an Excel® work book that our students use. We use automated data acquisition in the general chemistry laboratory for 5 experiments out of 12 for each semester. Students have a CD with their textbook for study and review and simulations.

In physical chemistry the students use Mathcad® symbolic equation software to do homework and all lab reports. We do some work with Mathcad live in class. Students have access to the Mathcad® library of programs that I maintain as a service to the chemistry community. We use email and Discuss to involve students in collaborative projects with students on distant campuses. We use the automated data acquisition devices in p-chem lab too.

I use graphing calculators in all my classes. I am beginning to use PowerPoint® presentations in my statistics classes. I use Maple® and the TI-89 in my calculus classes. I am currently using the ALEKS tutorial software in my intermediate algebra course to fill in the gaps in my students understanding of fundamental ideas of algebra. I have co-authored a textbook that requires the TI-89 on essentially every page. I am a co-author of the ODE Architect, an award winning numerical ODE solver with multimedia tutorials and projects on modeling the real world.

Web pages, tutorial software, spreadsheet data analysis, professional presentations, data acquisitions in laboratory experiments, lab reports.