

The Future of Technology in the Classroom

Jon Storslee, Roger Yohe, and Nancy Matte

May 2003

<http://www.mcli.dist.maricopa.edu/ocotillo/papers/index.php?yr=0203&id=2>

Our Colleges teach a wide variety of subjects and consequently find a single design for a classroom would be impossible. Three configurations were identified as possible models: Basic, Advanced and Computer Classrooms. The designs are distinguished by the amount technology used in the room and the ability to be reconfigured.

No one can accurately predict what new technologies will appear over the next 10 years. However with over 60% of the US population using the Internet in some capacity and a large portion of that group obtaining information about their world from Cable or Satellite TV, these technologies should be accessible in every classroom. The classrooms must be flexible in design to accommodate a wide variety of learning environments. Obviously science and health care labs will be configured and equipped to meet the needs of the courses.

Basic Classroom:

Objective:

The basic classroom will be the minimal amount of technology of available for every classroom. Faculty will have access to media from the Web and from conventional video sources. The classroom will be designed for subjects that don't require advance technology on a daily basis. The room will have the ability to add technology as needed for instruction. The tables need to be movable and configurable for collaboration or individual work.

Equipment List:

- Wireless Internet Access
- Projection: Overhead Projector or Digital screen built into the wall
- Computing System: Instructor Computer or Computer Docking station with all the connections for additional peripherals such as pad camera, videodisc or polling devices.
- DVD / CD / Cable TV access (through projection system)
- Tables and Chairs:

The tables and chairs will be movable so they can be rearranged for different types of collaboration. The tables can be rectangular or circular in shape.

Advanced Classroom:

Objective:

The advanced classroom will include all the technology of a basic classroom plus be configurable as separate rooms (similar to Estrella Mountain's Center for Teaching and Learning). One of the smaller rooms will be setup for videotaping and direct access to MCTV along with holographic display capabilities. The rooms will have tables, wireless access and a large video screen. Each table will be wired for polling while be still being movable.

The room will include a secure area capable of storing laptops for distribution to the students. The room will be equipped to handle distance-learning classes with live video broadcast capability and a wide variety of science classes. The room also will be used for seminars, workshops and a wide variety of special events.

Equipment List:

- Wireless Internet Access
- Projection: Overhead Projector or Digital screen built into the wall for each section of the room.
- Computing System: Instructor Computer or Computer Docking station with all the connections.
- DVD / CD / Cable TV access (through projection system)
- Pad Camera
- Laptops for each table (stored in a secure area for distribution)
- Printer
- Video cameras for TV based distance education programs
- Holographic Display system (capable of 3D representations of people or objects)
- Tables and Chairs:

The tables and chairs will be movable for different types of collaboration. The tables can be rectangular or circular in shape. The room can be divided into several rooms or opened for large group interaction.

Computer Lab Classroom:

Objective:

This classroom will provide computers for each student. The computer classroom will have flat screen monitors or Tablet PCs with removable storage devices (USB, Firewire or standard) for each student. The computers will be in groups for collaboration plus so an additional monitor tied into the instructor's computer (to supplement the main projection system.) This type of room will be for computer-based courses such as CIS, MST or computer enhanced classes.

Equipment List:

- Wireless Internet Access or Wired Access
- Projection: Overhead Projector or Digital screen built into the wall
- Computing System: Instructor Computer or Laptop Computer connected to a Docking station with all the connections.
- DVD / CD / Cable TV access (through projection system)
- Computers for Each student
- Printer
- Tables and Chairs:

Participate in an online discussion of this paper:

http://www.mcli.dist.maricopa.edu/cgi-bin/bbs/oco_paper2.pl