Hands off my Hands-on: The Trials and Tribulations of Adding an Electronic Classroom to Your Library Instruction Program

by

Marsha Miller, AMLS Instruction Librarian Indiana State University Library, Terre Haute, Indiana

We've all spent the last ten years or so dreaming about it, and now some of us have achieved it. In the spring of 1995, Indiana State University's (ISU) Library Instruction and Orientation Program was enhanced by the opening of an electronic classroom/lab adjacent to a regular classroom. Converted from a smoking room, the electronic classroom is a rectangular room with one glassed wall on a corridor. Three rows of computer terminals with their own printers and an instructor's cart with a complete projection set-up face a wall with a chalkboard, pull-down screen, and a desk and handout rack. Two Macintoshes and eighteen PCs (one an ADA-approved workstation) currently provide access to the library network and Windows 3.1 applications. (Windows 95 will be installed over summer 1997). The room is used for classroom instruction and hands-on practice, campus workshops, and library staff training. During some semesters, open lab hours are available.

The impetus for getting the lab came from a sudden awareness of the AT&T Equipment Donation Program. As with so many grant announcements, there was an extremely limited amount of time in which to prepare the mammoth amount of documentation needed to submit the information. More information about the project parameters appears at the end of this article. The grant was not funded, however the dean of libraries and the university administration committed adequate funds for the lab to become a reality. It became an official part of the instructional program during the summer of 1995.

This article shares some of the more interesting, significant, fun, and sometimes painful things that we have observed in our own lab situation, or heard from others. I'd like to especially acknowledge Melissa Muth's and Cathy Salyers' presentations at the 1997 Indiana Library Federation Annual Conference (see source list at end of this article) and the many colleagues who have shared similar experiences via the listservs BI-L and NETTRAIN-L.

Part I: Building the Lab

Architect? We don't need no stinking architect

If you're really lucky, you're helping plan a brand new library and can get the specifications just right. In fact, instead of just one computer lab, you may even be planning more than one. However, most people will have to plan with the current space/time continuum and use a particular room in a particular location. The most important rule about the planning process is: if an architect is going to be involved, get a hold of the architect as soon as possible. As too many libraries have discovered the hard way, architects love to build libraries - all that space! However, they don't really understand them. I hate to say this, but you'll have to fight for practicality over creativity, perhaps harder than you've ever imagined. Keep talking to the architects and don't assume that your plans/specifications/needs/desires will make it to the final blueprint. And even if they do, don't assume they'll stay there. Once you're done waylaying the architects, turn yourself into the unofficial construction foreperson. Visit your site every day. One Hoosier librarian discovered that half of her workstations were being installed to face away from the front of the classroom.

Plugs? You need plugs?

If the room has electrical outlets on the walls, you'll need them in the floors, and vice versa. According to Cathy Salyers, if you're adding electrical access, keep these things in mind:

- Access boxes should be flush to the floor and positioned properly for your furniture.
- When possible, have separate power distribution from other parts of the building.
- Use enough circuits to prevent overloading.
- Be certain that the wiring conduit is large enough to handle additional wiring.
- Check for proper grounding.

What do you mean the printer doesn't fit on the printer stand?

If you're lucky enough be able to include all new equipment when you get your new lab, you'll be able to coordinate. If you have to use your current equipment or furniture, try to leave room in the plan for possible changes in the future. Start working on a gradual phase-in plan for everything you currently use. Often the computers will be factored into the general library or campus plan but too often the desks, chairs, printer stands, window treatments, etc. are neglected. If you don't get them during the first year's planning process, update the information and submit the next year.

If each terminal has its own printer, you'll need to become adept at changing the paper from both front and back. There will always be one piece of the printer in your hand when you are finished, but the printer will be just fine. If there is a laser printer in the room, you'll have to have very clear instructions as to when and how to print (free or "copicard"). If possible, be sure people can't delete each others jobs in the printer queue. Have tissues available and maybe a few extra discs.

Lights, Camera, Wake Up!

It is essential that the room have as much lighting control as possible. A simple on/off switch for the entire room is unacceptable and can be downright painful. If you are used to dealing with a semi-darkened classroom, then you'll be able to anticipate the needs of the lab. Optimally, having control of individual banks of lights is best. For some reason dimmer switches were not an option for ISU; however, our classroom and the lab can both become three-quarters dark. This works best with our classroom. The lighting in the lab, with its rectangular shape and one glass wall is less than perfect, and getting more ambient light from the corridor makes it even harder to see screen images from the perimeter terminals. Consideration has been given to covering part of the glass, but aesthetically the situation has no good solution. If there are other computer classrooms/labs on campus that have situations you can check, by all means do so. If there is no current configuration you like, you'll at least know what to tell the designers to try to avoid. Have light switches or controls in as many places as you can, so that you're always ready to dim the lights. Besides, in two years you may decide to turn the entire lab 180° and you'll be ready! P.S. Get the biggest monitor screen you possibly can (trust me).

Rows or Clusters; Chairs or Stools

Traditionally, until recently, computer lab workstations were placed in rows, just like desks, or around the room, or both. Places like the University of Washington (see websites http://www.washington.edu/uwired/ and http://spap.cac.washington.edu/project/uwiredequip/) have spearheaded the concept of the "collaboratory" arrangement, placing computers in clusters so that students can work together. Indeed, in the public terminal areas, students are often seen spontaneously combining into collaborative groups. Perhaps you should always factor in two chairs per public workstation. If there is room now and if your current furniture allows it, you might want to experiment with that concept. Try to have enough individual workstations for ten to twenty-five people, with additional seating. We rescued some reference index stools from central storage, and it's one of the best things we ever did! (It also helps tired librarians.) During hands-on sessions, you may need to plan on the help of an extra librarian or an experienced support staff or student. If you have three or four lab sessions in a day and you do them all solo, you'll be amazed at how tired you are.

Always get chairs with wheels. Supplement with stools or other unobtrusive items. Be sure you can squeeze behind the student, the stool, the bulging knapsack, etc. without de-wiring the next row's cabling with your posterior.

Part II: Using the Lab

The minute your lab is up and running, people will sniff it out and want to use it for their own nefarious purposes. If you are the instructional scheduler, you must maintain the integrity of your lab by having a "use policy" in place immediately, if not sooner. Will you turn the lab on automatically every day? Will the first librarian using the lab turn on the equipment? Who will turn it off? Who will get the blame when all the monitors burn out at once? Be sure to have written instructions for handling basic problems. Organize training sessions for all librarians and others who might find themselves experiencing a problem in the lab, and have no one to run to. Assume that each librarian will come up with at least one unique problem during the early days of operation.

Things I've Seen People Do with a Mouse (that I'm sure are illegal in several southern states)

I used computers in the pre-mouse era and was able to smoothly transit into the mouse generation. I didn't realize that this was not an intuitive skill for everyone. Hopefully over the next ten years or so this problem will go away, but there are still a lot of people who are new to computers in general, and new to mice. Or they are Mac users and have awful problems with the PC mouse. The story of people picking up a mouse and pointing it at the screen like a Star Trek phaser has a basis. I've seen people grab the mouse and shove it right off the mouse pad, saying, "I can never get these things to work." I've seen them push and push the right mouse button while simultaneously shoving, sort of the point and zip method, all the while you're [patiently?] saying, "with the left mouse button, point and click...no, point and then click, no, point, DON'T MOVE THE MOUSE, now click, okay, let's start again....." Conversely, there is the problem of people who can use to the mouse with no problem except that they won't let go! They use it with Windows, they use it with Netscape, but you have to tell them over and over again that they have to put the mouse down and go back to the keyboard to use the online catalog and non-Windows CD-ROMs.

Headphones as Pacifiers

Here's a fascinating sociological phenomenon: each terminal in the lab is equipped with headphones for use with the multimedia resources. However, so many of today's students are used to wearing headphones that they come into the lab, sit down and automatically put them on, even though they're only going to use the online catalog. When you explain that they don't need them, they shrug and keep them on anyway. Sound barrier? Alienation? Pacifier? Political statement?

Software, Smoftware

How much? Which? Who buys? Who installs? Who troubleshoots? Who maintains? Who reconfigures? Networked or terminal specific? Temporary/ test or permanent?

As soon as planning begins for the classroom, if not sooner, start working on software with the appropriate campus people. If you have technical/ systems support within your existing library or information services structure, this will greatly simplify things. If this will be the first time you actually have to talk to computing people, they are especially amenable to donuts and other forms of friendly bribery. This may also be a chance to add software.

It is necessary to set up parameters for restocking the lab, (i.e., printer ribbons, paper, etc.), and that also means someone has to budget for it all. Who will be responsible on a daily/weekly/quarterly basis? Will storage space for supplies be included in the room and will they be securable? Be hard-line about knowing who is installing what software and when.

To Lecture or Not to Lecture, That is the Question

Let me be clear — adding the lab has been an excellent enhancement to the program. Students are increasingly getting used to lab time and will passively submit to doing exercises in class that they might have protested as homework in the past. Some instructors are willing to schedule an additional class session for librarian-guided, hands-on time at the time the students need to find their resources. Fifty-minute sessions that try to combine lecture and hands-on time are pushing it, so in ISU's case, that means that our Monday/ Wednesday/Friday sessions tend to be problematic. However Tuesday/ Thursday sessions meet for seventy-five minutes. That is enough time to make lab use a standard part of freshman composition classes that require an online catalog exercise during one session and an index exercise in the second. Experience indicates that spending at least twenty minutes in the lab is a good average, and at least thirty if the Internet is involved.

Having the lab has been a boon for meeting with high school students. They come expecting to find out how to use the entire library, search for materials, and leave in two to four hours. Before we had the lab, the students were basically turned loose following their classroom lecture demonstration. Now they simply move into the lab and get immediate and intense assistance. They are highly motivated to find materials and thus ask a lot of questions, print off their citations, and go forth. Usually about thirty minutes to an hour of lab time saves untold hours and frustration.

I prefer to do a classroom and lab combination session whenever possible, even if we're only in the classroom for ten to fifteen minutes. It allows the group to focus on the speaker. There are times when a lab-only lecture followed by hands-on session is appropriate either because of scheduling, or because an individual librarian's teaching style dictates this. Having an instructor's cart rather than a console that is locked into place has turned out to be beneficial, because not only can we move it around the lab, we can use it elsewhere in a larger meeting room. Having full projection capability in the lab is essential. If possible, have everything that is available from the classroom console (if you have one) also available on the lab console.

A small number of instructors are overexcited about the possibility of using a lab, and they denigrate the need for any lecture/demo component on the part of the librarian. This may become something that we will have to fight harder to overcome in the future. Some of my most difficult classes have been Internet workshops for public school teachers. Currently, Internet access is very slowly becoming available in the local schools. Teachers and administrators have been coming to the ISU Library for the past two years to receive Internet training. Behavior that they would never tolerate in their classroom occurs when *they* are the students. Like the doctor who is the worst sort of patient, the teachers won't leave the keyboard alone, and they'll start talking while the demo is still going on. The librarian doesn't want to dampen the enthusiasm, but unless you have a fool-proof mechanism for keeping busy hands off the keyboard, you'll have to insist on some classroom time. Respect for the instruction librarian's instructional design must be part of the program. In extreme cases someone might insist on a lab-only session. If you as the librarian insist otherwise, you may lose the session or have to present your case to an administrator. Often the instructor is overestimating their students' computer skills and experience. Have all of your arguments and philosophies in place. Too often, the librarian/scheduler hears from an instructor, "I don't want to give up more class time." Work on increasing the understanding of the course-integrated approach as well as fighting the "[more] technology always/automatically makes instruction better" syndrome. When scheduling instructional sessions, if there is even the remotest chance that you might decide to use the lab instead of just the classroom, go ahead and schedule both. A general awareness campaign before the fact is also handy. Witness the following message I sent to the coordinator of the Freshman Writing Program in the English Department:

Subject:	Library Instruction Lab Usage, Spring 96
Date sent:	Tue, 16 Jan 1996 14:55:41
Rob:	We're already getting scheduling from the Eng
	105 TA's (yea!) but here is some info for you
	to pass on to everyone:

1

M-W-F classes and the library instruction lab: If instructors would like hands-on lab time, they will need to schedule a 3rd session, following the LUIS and WILI sessions. This session could immediately follow the first two and be an opportunity for the students to work on the LUIS/WILI exercises, or it could be scheduled later in the semester right when the students are ready to buckle down and work on their research topic.

T-TH classes: There should be enough time to lecture and then go into the lab for 15-20 minutes, therefore, a 3rd session would not need to be scheduled, but can be at the instructor's discretion.

Open Lab Hours: It is our goal to have open lab hours for a minimum of 15 hours per week, beginning the week of Jan 22 — the open lab hours will vary from week to week and will be announced in a variety of ways. I plan on an e-mail distribution list for academic dept. chairs and assorted others, such as you! The lab schedule will ideally be posted each Friday for the following week. The lab will be staffed by various library staff. Lab use and assistance is limited to LIBNET (i.e., no e-mail, gaming, etc.). Students can get help with their LUIS/WILI exercises, research topics, or just use the lab because the public terminals are full.

As usual, please encourage the TAs to contact us with questions regarding the lab or anything else related to library instruction.

This is just one example of pro-active communication. The teaching assistants for English and communications receive more information during their general orientation sessions and/or when they schedule their sessions.

Extra note: If you have a classroom and the only option is to convert the classroom into a lab, you'll have to insist on software that allows you control of the room. (Contact Melissa Muth regarding *Extron*)

Open Lab Hours

Can the library's program support open lab hours? Will the lab provide only access to library resources? Will it provide access to students doing email and word processing? Who will staff the lab? Who will train the lab assistants? What level of training is necessary? Will the lab have a bouncer for those students who insist on trying to reconfigure the hard drive or read their e-mail during your fascinating lecture on the online catalog?

Part III: So Anyway (Conclusion)

A survey of the current availability, design, use, and policies of Indiana libraries with electronic classrooms falls outside the parameters of this article but would prove enlightening. If you can't determine what configuration a library has from visiting its web site, contact the instruction or reference departments and ask.

Source List and Acknowledgments

Janicke, Lisa Hinchliffe [janicke@alexia.lis.uiuc.edu]. *Planning an Electronic Library Classroom: An Annotated Bibliography*. University of Illinois at Urbana-Champaign. 1994.

http://alexia.lis.uiuc.edu/~janicke/Abstracts.html

Stanford University's Meyer Library Flexible Class-Lab. http://www-leland.stanford.edu/group/ct/flexlab.html

University of Oregon's Knight Library Electronic Classrooms http://libweb.uoregon.edu/instruct/classrooms.html

Muth, Melissa (00Muth@bsu.edu) and Cathy Salyers (cathys@saintjoe.edu). *Electronic Classrooms: Putting Together the Pieces. [A presentation given at the Indiana Library Federation Conference*, 1997.] Indianapolis, IN