Enhancing Library Instruction for At-Risk Students with Multimedia Presentations

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Library instruction has been a significant activity of the Reference Department at Indiana University South Bend (IUSB) for years. The five librarians involved in instruction activities meet regularly to discuss methods and content, attend workshops designed for them by the faculty development officer, tailor their instruction sessions to the needs of students for particular assignments, and attempt to involve students actively in the instruction. The development of a multimedia presentation for use in instruction sessions by librarians Rosanne Cordell and Brian Schuck evolved from these previous activities and the concern for keeping sessions updated and interesting, as well as relevant to student needs.

George Hubbard has stated that "the term 'multimedia' is one of those terms, like 'hi-tech', that can mean whatever you want it to mean..."[1] "Multimedia" has been used to describe the use of several formats (and types of equipment) in a single presentation, a single format that presents multisensory information, a slide-show with sound, or a computer program that uses a CD-ROM. In 1993 Cordell and Schuck attended a presentation that made use of a multimedia computer program that could integrate images from photographs, text, sound, and video into a single presentation. It is this type of multimedia presentation that seemed to have tremendous potential for enhancing the library instruction sessions at the IUSB Schurz Library, and we decided to produce such a presentation.

The Project

Library instruction sessions at Schurz Library typically involved the use of print sources, CD-ROM and on-line periodical indexes, the on-line catalog, and numerous handouts to present such information as a basic search strategy, a brief Library of Congress classification system, or a step-by-step approach to

locating journal articles in Schurz Library. Librarians were using an increasing amount of equipment, including two overhead projectors with separate screens, a networked computer connected to a CD-ROM drive and an LCD (liquid crystal display) panel, a chart, blackboard, and light pointer. The use of these separate pieces of equipment increased the complexity of the presentations as well as the risk of equipment failure at critical times. Add to this the usual rate of failure to connect to on-line databases, and the technical difficulties involved in current library instruction begin to be apparent.

We recognized that the use of a multimedia presentation with "canned" on-line sessions would save librarians time during instruction sessions; time that had been used in transferring from one type of equipment to another, connecting to databases, waiting for CD-ROM's to load, etc. The time saved could be used to cover the information needed by students, and the entire session would run more smoothly. In addition, such presentations might make it possible to highlight information on-screen more effectively and give even textual information greater visibility.

We began investigating various programs available to create presentations, including *Harvard Graphics, Multimedia ToolWorks, Action, PowerPoint, and WordPerfect Presentations. Multimedia ToolWorks* was a program provided free of charge to Cordell at a teleconference on its use. *WordPerfect Presentations* was available on our campus network, and ultimately, we chose to purchase a copy of this program for loading on the hard drive of the computer in our instruction room. Although *WordPerfect Presentations* is the program we chose to create our presentation, *Multimedia ToolWorks* has some excellent features that we continue to use.

We decided to base our first production on the instruction sessions given for a one-credit course for at-risk students, University Life Seminar U205. While not a required course, U205 is recommended for students who may be at-risk, are provisionally admitted, or who are uncertain of their commitment to earning a college degree. Ten to fifteen sections of U205 are taught each semester at IUSB, and students are required to have library instruction before completing a "Treasure Hunt" assignment. The unique element of this arrangement is that librarians, not instructors, wrote the assignment. Thus, all sections of the course have identical assignments and receive very similar instruction from librarians. By focusing our efforts on this course, we could create a presentation that could be used repeatedly by all instruction librarians.

We were advised that anyone considering presentation production should

begin with a clear concept of what they wished to accomplish, rather than what was available in software. Typically, multimedia creation programs offer far more options than you will have use for, and your presentation should reflect your own vision rather than serve to market the program. We decided that our presentation should be designed to enhance library instruction rather than replace it. Thus, our presentation would require the presence of a librarian to explain the various concepts and sources shown. Another consideration was that Schurz librarians attempt to involve students in discussions or activities that will illustrate concepts concretely, and we wished to retain as much interactivity in the instruction sessions as possible. With these principles decided, and with the Treasure Hunt assignment as our outline, we were ready to begin developing the presentation.

The Finished Presentation

Our presentation consists of an introduction, a section on the reference collection and interpreting Library of Congress call numbers to locate items in Schurz Library, a section on searching our on-line catalog, a section on the use of periodical indexes and locating journals and newspapers, a section on accessing information available in microformats, and a conclusion with a reminder to complete and turn in the assignment feedback sheet. Each section corresponds to part of the assignment students will be required to complete on their own after the instruction session. The examples used to illustrate each step were chosen to correspond closely to the assignment questions without duplicating them.

For the introduction, we borrowed a digital camera to photograph our library building. The photograph was uploaded to Schuck's Macintosh computer, where he was able to import it into *Color It* and *Aldus Digital Darkroom* to adjust the image clarity, tone, etc. This same procedure was used to photograph: periodicals in various formats, a microfilm reader/printer, the front page of a newspaper, and a student studying in the library. Digital cameras can be purchased for less than $1,000 and may already be available in your school system's media centers or journalism classes. Although we used black-and-white photographs, color cameras are also readily available on the market.

A screen capture feature available on our OPACs (on-line public access catalogs) allowed us to capture the on-line catalog screens as bitmaps and import them into our presentation. We were able to choose the background color and modify the text fonts, size, and color using features of *WordPerfect Presentations*. Maps of the library were available as graphics files, and Schuck converted them on his Macintosh to a format our PC program could import. I

converted them on his Macintosh to a format our PC program could import. I had previously made *WordPerfect* files of periodical index entries and our periodical holdings list for handouts, and these files were easily imported into *WordPerfect Presentations*. We used the graphics creating features of *WordPerfect Presentations* to add background or highlight color and make banners in the corners of screens on which to place questions. Shuck used the more sophisticated graphics programs available on his Macintosh to create screens depicting a pot of gold and rainbow for the introduction, and to edit one of the digital photographs for our ending slide. The flexibility given us by having access to both Macintosh and PC programs made up for the fact that we had few funds for buying new programs.

Each of the sections relating to assignment questions has a series of questions and answers appearing on successive slides to facilitate the librarians' oral presentation of information. By using special slide transitions, we were able to simulate books being moved to a lower shelf, one picture merging with another, the turning of a page, and other eye-catching effects that simulate movement even without the use of video.

Evaluating Multimedia Computer Software

In the course of trying out various multimedia computer software packages, we became aware of the many considerations that might be relevant in choosing which program to purchase and use. The following features might be examined for their relevancy to the project you plan.

1. Ease of programming. You are actually programming a computer slide show when you create a multimedia presentation, and the transparency of the program commands varies considerably among software packages. *Multimedia ToolWorks'* programming utilizes a series of characters to represent commands, and Schuck and I tired of trying to create slides in this manner very quickly. *WordPerfect Presentations* allows you to create most types of visuals on the screen with simple word processing or graphics creation commands. I have never found *Harvard Graphics* to be user-friendly, although several professors on our campus use it regularly. Which program you are most comfortable with is very much an individual decision, but do be aware that software varies considerably.

2. Conversion, especially of graphics. The more sophisticated programs will allow you to import files in a variety of formats, but when you are importing existing files from a number of sources and platforms, the

ability to convert from one format to another may save you time that would have been spent remaking some files. *Multimedia ToolWorks* has a conversion feature that will import and export a number of common formats with considerable ease, making it invaluable to our project. *WordPerfect Presentations* will allow import of *WordPerfect* files, although considerable editing is necessary in the *Wordperfect Presentations* program. If you want to use graphics from other sources, check to see whether the program you are considering will either import the format in which you have files or allow you to convert them.

3. Ease of importing files. This is related to the conversion features available in the software. If the program allows you to import a number of file formats directly without their needing considerable editing, you will save time, effort, and frustration.

4. Quality of the graphics program included in the software package. Some PC graphics programs are quite rudimentary and awkward to use compared to Macintosh products. If you plan to create many slides entirely on your own, access to programs that allow you to refine imported images (such as the brightness of a digital photograph), create pleasing backgrounds, or clip around portions of images for import into another file are quite helpful. We found it necessary for Schuck to create some slides on his Macintosh to be imported into our presentation in order to achieve the effects we were looking for.

5. Import of video and sound clips. Although we do not currently use videos in our instruction sessions, publishers are beginning to produce training videos for their electronic sources which might be worthwhile. We have upgraded our projection equipment to a type that will project video and sound, in anticipation of using clips in future presentations. Having a program that will allow us to incorporate video clips permits us to plan and create more sophisticated programs as we develop our skills.

6. Ability to make hyperlinks. Macintosh *HyperCard* users have long been familiar with hyperlinks, allowing branching into other files with a simple click on an icon, but this feature is not as commonly available in PC programs. Being able to load library maps, for instance, as a file readily available from any slide of the presentation would make it possible to answer directional questions whenever they occur, without requiring exiting the program or moving to an overhead projector to

display maps.

7. Exiting at any point, and returning to a particular slide. Students frequently ask questions about previous screens, and the ability to return to the slide in question allows you to be responsive to student needs. Most of the programs we examined allowed you to go back to the previous slide, but not to a particular slide without reversing through all slides in sequence. Whether the necessity of reversing through several slides is an acceptable compromise is a decision that is made in light of the types of presentations you will be creating.

8. Stand-alone capability. If you would like to make your presentation available for students or colleagues to use on their own, the ability to make a version of the presentation that does not require a special program to run it is quite useful. *WordPerfect Presentations* allows you to make a "runtime" version of presentations that can be run from Windows and does not require the use of *WordPerfect Presentations* itself. Instructors, in particular, find this a worthwhile feature.

9. Creation/playback differences. Some presentations look significantly different when played than they did when created. It can be frustrating to spend time getting images "just so" and then discover that in playback mode it is distorted in color, clarity, font size, or some other significant element. Checking the playback version of created slides frequently will allow you to anticipate such differences, but the differences ould be minimal for the software to be useful.

These features of the multimedia software packages should be considered in light of your planned projects and your personal preferences in program features. We did not find one "perfect" computer program and doubt that one exists, but we were able to find one Schuck and I were both comfortable using and which gave acceptable results.

Technical Considerations

When choosing among software packages, several technical factors may effect your decision on which to purchase or use. These include the following items.

1. Computer limitations. If you intend to use hardware you already own, you must be careful about the requirements of the software. Some packages require Windows, which would be an additional (large)

expense if you don't already own it. Some packages list the requirement for a 386 speed or higher, but run significantly better on a 486. You may need to have Super VGA monitor capabilities to make the best use of the software's potential. Checking out the requirements, and the software itself, should be considered an absolute necessity.

2. Display unit limitations. When we began our project, we had an LCD panel to project the images which did not allow us to project video, and which had a limited color range. These factors effected our overall plan as well as the specific choices we made for the design of individual slides. The differences between the finished presentation on a monitor and through the LCD panel convinced our administrators of the need for replacing the projection unit, which will allow us greater scope in the future.

3. Availability of help. Help screens included in software vary greatly in their usefulness, even among top name products, and manuals vary just as much. If neither of these types of sources is extensive enough, having a colleague with considerable experience with the same software may suffice to get you to the point of being able to experiment and teach yourself. Another source of help is training videos from the software producer or a third party producer. This kind of help was used by a group of faculty on our campus who had chosen *PowerPoint* software to create classroom presentations. Third party manuals are not widely available for multimedia software, but may be in the future.

4. Costs. Costs to consider might include any of the software, computer hardware, or projection equipment needed to produce and utilize multimedia presentations. However, lack of significant funding should not prevent you from getting started. You may be able to "make do" with your current hardware, and some free or inexpensive software is available: *Multimedia ToolWorks* was given to us free of charge for attending a teleconference on its use. Seeing a finished, polished, and useful production might convince your administrators of the need for investment in this area, as it did for our administrators.

Plans for the Future

This project convinced us of the usefulness of multimedia software as yet another teaching tool for presenting information to students. Such presentations, like other media, do not replace the instructor or librarian, but can facilitate the presentation of information in much the same way that overhead

projectors or blackboards did in the past. We plan to create short presentations on such topics as the Library of Congress classification system and interpreting LC call numbers; using periodical indexes; the differences between scholarly and popular literature; and search strategies in various on-line databases to be used as backups when live demonstrations are not possible. These types of presentations can be used in library instruction for many courses, making the time invested well worthwhile. To facilitate future production of presentations, we have set up a subdirectory on our local network for instruction librarians to share handouts that they have created electronically. These can be easily imported into presentations and edited as needed. Such cooperation with other librarians would be possible even if you did not work in the same library and must exchange disks. The presentations themselves could be shared if you coordinate your hardware and software.

It is the authors' belief that the use of multimedia computer software can greatly enhance library instruction if the librarians approach this medium as an instruction tool and have a clear vision of their purpose in using it. Erwin K. Welsch stated that, "there's a place for [computer assisted instruction] . . . yet it should not be used as a substitute for human-to-human teaching; rather it needs to be utilized as a supplement or as a means of mastery learning/testing..."[2] The presentations are visually interesting and can help accommodate various student learning styles by allowing information to be presented in more than one medium simultaneously. The electronic format allows for easy editing and customization to the needs of particular groups of students in ways that other formats do not. Multimedia presentations may well be the "blackboard" of the future in library instruction.

Endnotes

1. George Hubbard, "Multimedia," *School Library Media Quarterly* 22, no.1 (fall 1993):45.

2. Erwin K. Welsch, "Technology and Library Instruction: The Potential of the Audio Visual Connection from IBM," *OCLC Micro* 6, no. 3 (June 1990):27.

Software Discussed

Action!
Optimized Systems Software, Inc.
1220 Rock Street
Rockford, IL 61101

Phone: (815)968-2228

Aldus Digital Darkroom
Aldus Corp. (Consumer Div.)
5120 Shoreham Place
San Diego, CA 92122-5936
Phone: (619)558-6000

Color It!
Timeworks, Inc.
625 Academy Drive
Northbrook, IL 60062
Phone: (708)559-1300, (800)535-9497

Harvard Graphics
Software Publishing Corp.
49 Kessel Court
Madison, WI 53711
Phone: (608)274-6813

Multimedia ToolWorks
(Producer Information Not Available)

PowerPoint
Forethought, Inc.
P.O. Box 32
Sunset, SC 29685
Phone: (608)274-6813

WordPerfect Presentations
WordPerfect Corp.
1555 North Technology Way
Orem, UT 84057-2399
Phone: (801)225-5000, (800)451-5151