EDUCOM stimulates librarians' imaginations

Kenneth King, president of EDUCOM, led off the 1991 annual conference, "Curricula, Computing, and Culture," by supposedly quoting Yogi Berra: "If the road forks, take it." Perhaps that was a metaphor for the 2,200 computing specialists, librarians, and faculty members attending the EDUCOM '91 conference held in San Diego, October 16-19. Each of these groups of professionals has its own expertise, yet all are proceeding towards a common goal of making best use of electronic technology in colleges and universities.

Each year more librarians find themselves using technology in cooperation with faculty and computing specialists in order to improve teaching, research, and learning on their campuses. Although still a minority as a group, some librarians find that participation in an EDUCOM conference helps bring their paths into contact with other information service professionals in a collaborative atmosphere.

EDUCOM, a non-profit organization comprising about 600 colleges and universities, is concerned with "increasing individual and institutional intellectual productivity through access to and use of information resources and technology."

A typical day at EDUCOM '91 consisted of an 8:00 a.m. general session, one or two sets of concurrent sessions, a tightly scheduled "in-house" served luncheon and program or a box lunch to be taken to the hotel gardens, and afternoon choices of field trips, birds of a feather sessions, or special interest group meetings. Exhibits opened after lunch and ran until 6:00 or into the early evening depending upon the day.

Vendors provided more than just exhibits and help sessions in their suites. Apple provided several dozen Macintosh machines in the convention center and the conference hotel and Digital Equipment Company provided networking and a link to the Internet. Conference goers could use the Internet to communicate with their offices and other locations via electronic mail. In fact, an early draft of a portion of this article was sent directly from the conference to the editor of College and Research Libraries News for a critique. The same system also served as a conference message board.

Field trips this year included the Scripps Institution of Oceanography, the San Diego Super Computer Center, the Salk Institute, the General Atomics' Fusion Facility and its Robotics System, and area universities. Evenings were highlighted with all conference receptions the first two nights and, for an added fee, excursions. For those wishing to spend their evenings at the conference, many vendors had staff available in suites to help registrants with ideas for new technical applications or the refinement of current ones. For those whose minds were beginning to "max out," a free multimedia concert of electronic and acoustical music was performed one evening. Not only was the program entertaining, but it was a part of a music course developed and taught at the University of Southern California by the three performers.

Many of the presentations and exhibits featured specialized materials for college and university courses and broad, sophisticated information services for students and faculty. The latter included some really innovative systems of access to the library and other information sources.

During a preconference session, Dr. Joseph Henderson and Dr. Robert Brentrup, both of Dartmouth College, spoke on multimedia and networking to an overflow (and over-registered) audience. Just a tour of their "star wars" array of computers, monitors, video recorders, electronic switches, phone lines, projectors, etc., used for the one day session was nearly worth the price of admission—and most of it worked!

Henderson presented his interactive media database program for training medical personnel that showed fascinating ways to use information (text, motion, and sound) in an interactive manner. It certainly stimulated the imagination of those in attendance who weren't worn out from watching all the equipment in use.

Brentrup demonstrated Dartmouth's graphic user interface (GUI) as a front end to its library catalog. Dartmouth built its own automated library system by elaborating on the B. R. S. database engine and then designing its own screens and interfaces. Using this GUI, patrons are able to create searches in the library catalog by using a mouse and windows just as one would on a Macintosh, an IBM machine which utilizes Windows 3.0., or on a NeXT machine. In fact, the GUI used at Dartmouth is Macintosh-based, although the system can be accessed by other micros and even by dumb terminals (without the GUI in the latter case, though).

Patrons can use any micro and the same terminals and the same search methods to search many other databases and various information sources on Dartmouth's campus. For example, Dartmouth has a large collection of Shakespeare's plays; 33 of his plays are available in full text and with full indexing across the campus electronic information network.
Thus, students can not only gain access to these texts from anywhere on campus, or by dialing-in from off campus, but can perform textual searches of the plays through controlled vocabulary and free word searching. Similarly, Dartmouth's commentators on Dante's Divine Comedy will be put on the network in a hypercard format in the near future.

Dartmouth maintains a very large file of statistical information. Students interested in using these statistics can not only download portions of a database, but also apply these data against the Statistical Package for the Social Sciences and run their own tests. Dartmouth and Middlebury College share a license to use the MLA Bibliography online over their own networks.

Want to see the yearbook photo of a student? With scanning technology, Dartmouth could place each student's photo on the network. However, due to unrestricted access to Dartmouth's information system via the Internet, the university has to decide on the privacy question. If the system is activated, a faculty member who cannot recall a student's face could use the network to provide the image of that student. Images from Baker Library (portraits, building layouts, etc.), as well as many other images from the college's files, can also be distributed across the network.

In closing, Brentrup revealed that Dartmouth is close to being able to send, on a limited basis, full motion video across the network. These would be short files and might utilize only a fourth of the screen in order to reduce the number of pixels supported. Most of us have been limited to seeing static information on our micros. The possibilities of seeing dynamic images, such as the results of molecular experiments, right on the screen of the micro boggle the imagination.

Denise Troll of Carnegie Mellon University spoke on "expanding the boundaries of the library's catalog." Carnegie Mellon is in the second phase of Project Mercury, its campuswide information system which includes the monographic database of the library, the CMU journal holdings, a collection of archival pictures, periodical and newspaper abstracts, and various commercial databases. Full text databases include the campus information directory, selected encyclopedias and dictionaries, and a business database. Sometimes the whole is greater than the parts. The CMU system even has links from the bibliographic database to a full-text database or an image database. For example, there is an ISBN link from Choice reviews online to the library catalog so the user reading a Choice review can determine if CMU has the book. For items not held, an interlibrary loan request can be initiated from the patron's micro.

Vanderbilt University has files of clippings, pamphlets, and specialized educational materials available online. Brief subject descriptors as well as author and title entries make the material searchable across the network with full-text images available to the user.

Ronald Kalinoski of Syracuse University presented examples of the audio and video images that Syracuse is placing on the University Network and hopes to place on the high speed National Research and Education Network (NREN) in the future. The Syracuse database will consist of several million digitized sound recordings, all described in MARC format. These are not just bibliographic records, but actual digitized sound recordings available over the network. In many cases the liner notes, record jacket, or even the label itself have been scanned and are available as part of the database. Those attending this session were not only able to hear classic jazz recordings from early in the century, but to see the images that were packaged with the recording and to read any associated text—all over the campus network and later over NREN. If you have ever wondered what the NREN can do for you and your country, or if you have ever had trouble grasping exactly what multimedia means, this project answers those questions.

Each year EDUCOM gives awards to outstanding achievements in the use of information technology. Many of them this year went to multimedia programs. One of the awards went to a four person instructional team from Penn State University that designed a multimedia program to help students better understand Dr. Martin Luther King Jr. Students can use a mouse to click on buttons and move from the text of a speech to the text of a newspaper file covering the speech and on to a video recording of an ABC network news telecast of the speech. Included also are a collection of maps and other still images, texts of relevant laws and historic documents, biographical information, historical data, etc., all of which make for almost encyclopedic coverage of Dr. King.

The Penn State program, along with most of the others covered above, were developed by teams representing various disciplines and campus offices in a general systems approach to problem solving. In King's apocryphal story about Yogi Berra, Berra would have found the main road (the solution to an educational objective in our metaphor) but only by walking some distance on each specialist's path. EDUCOM is an opportunity for librarians, computing specialists, and faculty to come together to share the results of their common travels in search of teaching excellence.

If you wish to get to EDUCOM '92, you should mark your calendar for a trip to Baltimore and Johns Hopkins University for October 28–31, 1992. Basic registration this year was $350, so plan early if you need support.—Willis M. Hubbard, College Librarian, Gettysburg College, Gettysburg, PA.