Integrated Media Operations in an Academic Library: A Profile

CAROL L. HARDY JUDITH A. SESSIONS

Background

Not so long ago, audiovisual (AV) services, television production and support, and library services on college campuses were separated (some might say blissfully separated). The library, basically a repository of books, served a warehousing function. The audiovisual center, which catered exclusively to the instructional needs of the teaching faculty, was primarily a pushcart delivery service. Television (TV) production services, if they existed at all, typically consisted of one black-and-white camera, no editing facilities and a few one-inch, old-style tape playback units.

Interaction among these three independent academic support services was practically nonexistent. Each provided a distinct service and each was intent on developing its own program. Friction often resulted as the areas competed for available funds. In most cases the lion's share of these funds went to the library. Television was in too embryonic a stage of development to be noticed or taken seriously. Audiovisual material was considered the unwanted stepchild or, perhaps more appropriately, the twin in the iron mask.

In the early 1970s a conceptual framework for integrating library AV and TV functions began taking form. The Carnegie Commission on Higher Education, in the *Fourth Revolution*, supports integrated learning resources, stating that:

Carol L. Hardy is Head, Nonprint Media Department, Meriam Library; and Judith A. Sessions is University Librarian, Meriam Library, California State University—Chico.

nonprint information, illustrations and instructional software components should be maintained as part of a unified informational-instructional resource that is cataloged and stored in ways that facilitate convenient retrieval as needed by students and faculty members.¹

Similar thinking shaped the 1972 recommendation of the Task Force on Instructional Media at California State University—Chico (CSU—Chico):

Learning resources, e.g., Media Center, Library, Computer Systems, common distribution systems for the resources both on and off campus, etc., should be coordinated so that they become a functioning integrated system.²

Chico's library became the focal point for the majority of integrated functions. In a report to the CSU system's Council of Library Directors, the council's Learning Resources Committee reflected this sentiment:

the discipline of librarianship is based on the bibliographic organization of materials; their evaluation and selection, their cataloging and classification, the development of appropriate circulation and delivery systems, and the effective use of the library's resources through reference and instructional services. It is therefore the library's responsibility to add nonprint materials to its collections and to integrate these materials into a single coordinated library learning resource service to the campus.³

Administration

Once the concept of integration is accepted, the next step is implementation. It is the administrative function that provides the ways, means, and directions for achieving the goals and objectives. At Chico, the administrative unification of the Meriam Library, the Computer Center, and the newly-formed Instructional Media Center (IMC)—all under the direction and leadership of a dean for learning resources (later changed to dean of information services)—gave impetus to the concept of a functioning, integrated system.

Having the components ready, however, does not always guarantee success—goals and objectives must be clearly articulated, priorities must be set and agreed upon, operations must be analyzed, and most importantly, there must be a firm commitment by both staff and administration to the concept of integration. Otherwise conflict may arise among units over budget, staff, or space allocations; and growth without direction or growth contrary to the overall desired outcome may result.

The challenge then to CSU—Chico was clear: If integration was to be real, it would make far-reaching demands. Chico had to create a plan, not just for the present, but one that would accommodate new technologies as they appeared and as they were given new applications.

Functions

Many of the functions of the library and of the media center overlap. Therefore, identifying the functions of the library and the media center was the first task (see fig. 1).

Audiovisual Library Reference/Consultation Consultation/Production Collection Development **Production Development** Materials Selection **Materials Selection Equipment Selection** Acquisition Cataloging/Classification Acquisition Cataloging of Materials Circulation Materials Circulation Interlibrary Loan Equipment/Delivery Reserve Off-campus Rental/Loan **Bibliographies** Booking Maintenance and Repair Production

Figure 1. Functions of the Library and the Media Center

The second task consisted of consolidating and integrating overlapping functions into the appropriate units as illustrated in figure 2. The most logical functions to be handled by the library are *cataloging* and classifying materials, since the discipline of librarianship is based on the organization and classification of information. In addition, one of the objectives of integration efforts is standardized, centralized bibliographic access to the library's holdings regardless of format: a place where each user—whether research scholar, teaching faculty, or student—can gain access to all available material on a given subject regardless of format through one catalog.

It would be misleading to imply that conversion to an integrated catalog can be accomplished without trauma. However, with proper consultation and cooperation between media center and library personnel, problems can be identified and solved to everyone's satisfaction. For the most part the efforts in integrating the cataloging and classification

Function	Library	Media Center
Reference	X	
Consultation	X	X
Collection Development	X	
Production Development		X
Materials Selection	X	
Equipment Selection		X
Acquisition (Materials)	X	
Acquisition (Equipment)		X
Cataloging/Classification	X	
Circulation, Materials	X	
Circulation, Delivery, Equipment		X
Interlibrary Loan	X	
Reserve	X	
Maintenance and Repair		X
Bibliographies/Mediagraphies	X	
Production		X

Figure 2. Consolidation and Integration of Overlapping Functions

functions at Chico have been successful. The first step was the identification of the bibliographic data elements for nonprint material. Next came the realization that the coverage, content, and form of bibliographic information was basically the same for nonprint as for print media. Finally a cataloger was found and trained to begin cataloging nonprint materials. Initially, using the ISBD (International Standard Bibliographic Description) was especially helpful in analyzing the data elements. In addition, the Library of Congress published its MARC formats for media.

The Meriam Library now provides integrated bibliographic access through an online catalog. Although the online catalog seems to be perpetually in a state of being improved, enhanced, and updated, it does have some very definite advantages. However, patron reaction was not always positive insofar as nonprint media was concerned. Some users believed that the integrated catalog was too cumbersome; and while many of the faculty found it advantageous to have complete bibliographic information on all available material, others found it awkward to search thousands of records for books, periodicals, filmstrips, and slides when they were looking for a 16mm film. One of the enhancements of the online catalog most beneficial to integrating nonprint media records into the library's main catalog has been the addition of the

Boolean search capability which allows patrons to search by format. Another improvement is the ability to access the catalog from remote sites. For example, a faculty member in an office across campus can gain access to the library's catalog by using a terminal, a telephone, and a modem. Likewise, a student hundreds of miles away at one of CSU—Chico's remote learning sites has equal access to the catalog.

Acquisition

Acquisition is another activity best handled through established library procedures. At Chico a portion of the library materials budget is allocated by formula to the academic schools and departments; and funds from the library budget may be used to purchase nonprint as well as print media.

Selection and Collection Development

The library has established material selection and collection development policies and procedures. However, when the decision to add nonprint media was made, the selection task became more complex. A major purpose of nonprint media in an academic setting is the direct support of classroom instruction. Using a particular nonprint item may be an integral part of a course. Therefore, the teaching faculty tend to be more directly involved in selecting nonprint materials than print materials. Due to the fragility, technical complexity, and relatively high cost of nonprint media, additional care is needed in the selection process. The nonprint librarian usually must work closely with the faculty, the collection development librarians, and the acquisitions librarian to verify such information as duplication of material, cost, distribution rights, format, and technical compatibility. The nonprint librarian then coordinates the preview and evaluation process, which often makes use of media center, rather than library, facilities.

On the other hand, the selection and purchase of equipment, whether it be nonprint playback equipment for use by library patrons or sophisticated production equipment, are handled primarily by instructional media center personnel who, in a well-integrated campus operation, will have the responsibility of repairing and maintaining it, wherever it is located—in the classroom, the library, or the media center itself.

Production Activities

Faculty sometimes find that no suitable commercially produced programs are available for a specific class. When this happens they may decide to have a media program produced. Since production activities

are in the realm of the instructional media center, the library should be able to refer the faculty member to a production development committee (or directly to the production center) where a specific media program will be designed to meet the instructional need.

Circulation

Circulation is another traditional library function made more complicated by the addition of media. The problem is often partly due to space and facility limitations, and partly due to staff unwillingness to relinquish traditional practices. Providing playback equipment within the library has been perceived by some as an invasion and occupation of library research and study space. It is true that a mediated work station requires more space than that required for reading or study alone. (Current systemwide standards are: for a mediated work station, 52 sq. ft.; and for a seating space, 25 sq. ft.) In addition, visual supervision of mediated carrels by staff is important for assisting patrons who may need help in the operation and utilization of media equipment. Some types of media equipment are noisy—such as 16mm film projectors or computer printers. Other types of equipment have special lighting requirements. In order to prolong media's usefulness, regular cleaning and inspection of media materials and equipment are essential. While this special handling and allocation of space and facilities requirements are not peculiar to media, they are unique in a library setting. At CSU—Chico, all nonprint media other than 16mm films are housed in and circulated from the library's Nonprint Media Department. The materials are in a closed stack area with limited-loan, in-building circulation. Playback equipment is available in fixed carrels in two large rooms adjacent to the media circulation counter. Although the 16mm films are cataloged by the library and receive Library of Congress call numbers, the old accession numbering system has been retained and is still used for shelving and retrieving the films from the film racks. Circulation of the films outside the building is restricted to faculty for classroom instruction. Preview rooms are provided for in-house previewing or viewing. Films and the appropriate projection equipment are booked and circulated from the Instructional Media Center Booking Office, which is located in the basement of the library building. However, the library staff continue to plan for the time when all formats in the media collection are housed in and circulated from one centralized location.

In 1978 the IMC started a program to "mediate" (that is, to equip with permanent media facilities) the campus classrooms. Currently, over 100 classrooms and laboratories on campus are equipped with

16mm projectors, slide/tape units, and speakers, all housed in fixed projection booths. Although this has not eliminated the need for physical delivery of equipment, it has reduced the number of daily trips and the delivery workload by slightly more than 50 percent.

The IMC enhances circulation by its electronic distribution of video on the campus twelve-channel, closed-circuit cable television system. The majority of campus classrooms now include television monitors and remote-control devices. By using the remote control, faculty can control a videotape transmission from the central electronic distribution room in the basement of the library building.

Reserve

Reserve is another time-tested academic library function. With some modification in procedure to allow for the physical inspection of circulated media materials, the reserve function works as well for non-print media as it has traditionally for print media. One solution is to integrate physically all reserve materials in one reserve operation. However, one word of caution: fixed installation playback equipment for nonprint should not be placed too close to the conventional reserve reading area. Often nonprint viewing and listening stations (even with headphones) can create a distraction to a print reader. Also, the lighting requirements for viewing some nonprint media are not appropriate in a reading room. It is best to separate nonprint media carrels from reading areas if at all possible.

Two functions of libraries and media centers appear so similar that integration would seem obvious: interloaning books and off-campus media rentals. However, with media there are so many associated procedures—i.e., scheduling of equipment and location, scheduling people to view the material in the one or two days it is on campus, and coordinating the formal evaluations that are frequently required by distributors—that in practice, a separate operation is justified. The interlibrary loan function may be handled by the library and the off-campus rental of media by the IMC booking office. The turnaround time for off-campus media rentals is usually much faster than realistically can be expected for interlibrary loan. (Of course, if a book on interlibrary loan also carried a rental rate of \$200 a day, the turnaround would possibly be just as rapid!)

In most of the previous instances, consolidation and integration of overlapping functions has proven effective. The concept of information services has increased productivity and improved access and service while eliminating unnecessary duplication.

Formats

Selection of nonprint media should receive the same careful consideration by subject-specialist librarians as do the print materials in an academic library. Using media selection policies and subject-specialist librarians affords the potential for developing a well-balanced nonprint media collection that meets the teaching needs of the faculty. CSU—Chico's collection, probably larger than average, consists of approximately 12,000 titles in a wide variety of formats. Although initially an attempt was made to adopt certain media formats for the campus, the rapid growth and shifts in media technology made this plan impractical. Other reasons for adding different formats to the collections have been market shifts and price. Although the IMC does produce educational programs for inclusion in the media collection, the major portion of the collection is acquired through commercial distributors.

Market trends of the past few years have influenced the selection process for educational media. Originally the principle format for educational films was 16mm, but commercial distributors gradually began to offer a choice between 16mm and three-quarter inch U-matic videotape cassette. The trend is currently away from three-quarter inch to one-half inch cassettes, with many distributors offering a choice between 16mm film and three-quarter inch U-matic, one-half inch VHS, or one-half inch Betamax videocassette tape. For a while a few distributors offered a fourth choice—videodisc. Curiously, neither the laser nor the capacitance videodisc formats succeeded in the home market and they have all but disappeared. However, the laser disc is beginning to make a comeback in the eductional marketplace as an information storage and retrieval device. The laser disc will probably have an important role when used in conjunction with computers for interactive educational programs. (As an early example, personnel from the Instructional Media Center and the library, and a faculty member from the School of Communications at Chico recently collaborated in the design and production of a microcomputer and videotape interactive CAI [computer-assisted instruction] program that is designed to teach library users to use the online catalog. The next step is to transfer the program from videotape to laser videodisc. The integration of the microcomputer and laser disc will offer faster response time, add the capability to insert still photographs, and give more editing precision.)

Price can be a considerable factor in format selection. One extreme example illustrates this point—to replace one very popular film, the 16mm format cost \$900, VHS cost \$575, Betamax cost \$450, and the videodisc cost \$35. However, most libraries and media centers do not

have an adequate array of videodisc playback equipment whereas they do have a large installed base of videotape players and film projectors. Consequently, price alone cannot and indeed should not govern format decisions.

16mm Educational Film and Video Formats

Even though the 16mm educational film continues to climb in price, approximately 100 new titles are added to the CSU—Chico film collection each year. Given a choice, some faculty prefer paying the higher price for the 16mm version of a film believing that 16mm continues to be the better teaching/learning format in the classroom. Some proponents of film over television projection as a teaching tool in the classroom say the reasons are sociological—e.g., large-screen, movie theater viewing v, small-screen, television home viewing. Others say the reasons are physiological-e.g., limited eye movement or the "shutdown" reaction of the left brain to the repetitive light stimuli of the television screen. However, probably the most convincing argument is the simple fact that, seen side by side, the resolution and image quality of 16mm film projected onto a large screen looks much better than the same image projected through a television monitor. In spite of the preference for film among some of the faculty, Chico's video collection grows steadily, keeping pace with the 16mm collection. Currently, Information Services provides in-house and classroom viewing access to the following motion picture formats: 8mm and 16mm films, threequarter inch U-matic and one-half inch VHS videocassettes, and laser and capacitance videodiscs. Faculty still make primary use of the permanent 16mm film collection, usually in direct support of classroom instruction. About 20 percent is in-house viewing by students and other patrons for research and class assignments. Use of the videocassette collection is about equally divided between classroom and in-house viewing. The videodisc collection, consisting mainly of feature films and art films, is mostly for in-house viewing, in part due to the rarity of playback equipment around campus. About 15 percent of the videodisc collection use is for instructional purposes, primarily by cinema studies students and film production classes. The remaining 85 percent of videodisc usage is for entertainment and cultural enrichment.

Film Loop Format

Although the film loop is not a popular format for the college classroom, it is an effective tool for teaching the single concept. The Meriam Library has a small collection of film loop titles. Viewing is almost solely in-house. It would seem that the film loop is being

replaced by video. In fact, film loop equipment is becoming difficult to locate for replacement.

Slide, Filmstrip, Sound Slide, and Sound Filmstrip Formats

The slide, sound slide set, filmstrip, and sound/filmstrip set formats are an important part of the media collection. When motion is not essential in a visual presentation, slides and filmstrips offer a relatively inexpensive alternative to motion pictures. However, the use of sound enhances most visual presentations, not just motion pictures, and therefore more and more sound slide or sound/filmstrip sets are being produced. Although the sound portion of these sets is usually available on audiodisc and audiocassette tape, the library at CSU—Chico has adopted the slide/tape whenever possible having found that slides and audiocassette tapes are less susceptible to damage than records and filmstrips in the hands of the inexperienced. However, when a particular program is not available in slide format, the filmstrip version is purchased. In-house production is limited to slide and slide/tape sets. Of these formats, utilization is equally divided between instruction in the classroom and individual use within the library.

Computer Software Formats

The newest formats to be added to the media collection are computer software. Policies and procedures to acquire, catalog, store, and circulate software are still developing; consistency with policies for other formats is the desired goal. Library material funds allow the purchase of software which is added to the library's collection and made available to the entire campus. Traditionally, such material is available for use in the library. With this policy in mind the library does not purchase software packages intended for office or laboratory settings. Recognizing that software evaluation is a problem throughout the campus, the library is investigating the feasibility of setting up a software/microcomputer reference area to provide coordination and processing necessary to support the academic and research needs of the university.

The library staff is working closely with the Academic Computing Coordinator, a faculty position reporting directly to the Dean of Information Services, to develop and expand computer software and hardware services, and in particular a microcomputer laboratory. The microcomputers selected for the campus include the Apple II, the Apple MacIntosh, and the IBM PC. Currently, several of each of these machines are located in the library, but they are restricted to faculty under the terms of the special grant through which they were acquired.

Plans are under way to add more machines and make them available to all library users. Obviously many problems are inherent in introducing new technology into the library. However, the library is slowly developing its response to this valuable educational medium.

Overhead Transparencies Formats

Overhead transparencies remain an economical and practical instructional tool. The collection is small but well used by the teaching faculty for classroom instruction. Transparencies are so easily produced, particularly with today's copying machines, that the purchasing of commercially-prepared transparencies is much less than it used to be.

Games, Kits, and Simulations Formats

Although the nonprint collection contains a few games, kits, and simulations, these formats have been unpopular with our academic users.

Sound Recordings Formats

A large and well-balanced sound recording collection is essential to any academic library's nonprint collection. Most, if not all types of music should be represented on either audiocassette or phonograph records. The spoken word recording should also be very prominent in the collection. Sound recordings are the only formats at CSU—Chico that circulate outside the library for home use; they have a three-day circulation period.

Staffing

Figure 3 shows the place of nonprint media in the organization chart of the CSU, Chico Information Services unit. Although the Nonprint Media Department Head is an Instructional Media Center-funded position, the reporting structure is through the library's Access Services Division. The primary responsibility of this position is the overall coordination of media utilization. This includes the coordination of those people, places, and things that give optimal access to and utilization of nonprint media resources. The only library-funded staff member assigned to nonprint media is the Desk Supervisor (Library Assistant II), who reports to the Nonprint Media Department Head. The other three support staff positions within the Nonprint Media Department are located in and funded by the Instructional Media Center.

There are four professional positions in the Instructional Media Center. The director's position, which is at the Associate Dean level,

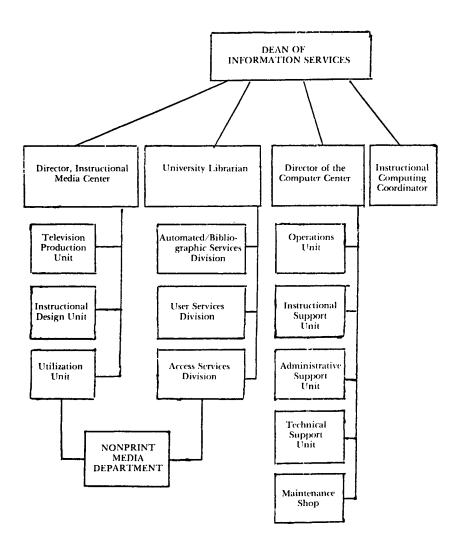


Figure 3. California State University—Chico, Information Services Organization (1 April 1984)

reports to the Dean of Information Services. The remaining three professional positions consist of two coordinators and the librarian, the latter of whom also functions as the library's Nonprint Media Department Head. Each is responsible for a specific service function and service area and all share, more or less equally, in the instructional design and production development process. Each brings to the process a particular set of skills, training, and knowledge. For example, the nonprint librarian will provide the necessary research for a new program being considered for production and/or assist in actual production in addition to managing the IMC's arm of the booking/distribution service.

Prior to integration, the Instructional Media Center spent more than half of its allocated funding on the delivery of media and equipment. This is not unusual since physical delivery of all media formats constituted IMC's primary means of dissemination. However, due to integration of shared and overlapping functions with the library, the addition of mediated booths to over 100 campus classrooms, and electronic distribution to classrooms through closed-circuit television, emphasis has shifted from one-dimensional access to the multifunctional center providing media production, instructional television, satellite reception and transmission, and basic audiovisual services.

Facilities

It is difficult to describe facilities without discussing the services provided in and through those facilities, particularly in the context of a media center. In 1974 the Instructional Media Center and the library moved into a new building that was known as the Learning Activities Resources Center. The name has since been changed to the Meriam Library, but the original appropriately reflected the mission and the charged atmosphere of the time.

The Meriam Library is a large, modern building with four floors and a half-basement. The Instructional Media Center, which is located in the basement, concentrates on the design, production, and utilization of instructional media materials; and it possesses state-of-the-art television studios, electronic distribution facilities, and satellite transmission and reception capabilities.

The utilization component, which is a shared function with the library, is managed by the Nonprint Media Librarian and focuses on the coordination of people, places, and things to ensure the most effective learning/teaching outcome. Conceptually, services included under utilization are: access points for nonprint materials within the library,

the IMC booking and distribution area, and the electronic distribution area. The IMC booking and distribution areas house the 8mm and 16mm film collections and the circulating equipment. All materials circulating from this area are booked prior to use. The booking office also coordinates the very important preview and evaluation process required for all films prior to purchase.

Nonprint media facilities within the library also include three fully mediated library education classrooms. These rooms and equipment are used frequently by library faculty for bibliographic instruction, for teaching the use of the online catalog, and for various workshops throughout the year; and the rooms are available for class use on a first-come, first-served basis. Twenty-four fixed-installed, six-sided mediated carrels provide in-house viewing for all media housed in the library nonprint media section.

Another heavily used area is a separate reference and index section for nonprint media. This area is divided into three sections. The first contains duplicate copies of important nonprint media reference books and indexes; the second includes the catalogs of most major film rental sources, and the third—a rather large section—provides access to hundreds of media distributors' catalogs and brochures. Although there is some duplication of reference books that are in the main reference collection, having a special, nonprint media reference center has helped reduce the frustration in locating and selecting media materials for purchase or rent.

Conclusion

It takes time to effect change in all institutions of higher education. However, CSU—Chico in the last ten years has witnessed positive change and growth. Where once there were three independent, segregated operations, there is now a single, functioning, integrated system called Information Services. Traditional functions have been realigned and consolidated into more efficient operations. Other functions have been enhanced and revitalized with new technology which in turn has provided better and more flexible service. Integration not only affords better and expanded service, but it allows service to a greater physical area through ITFS (Instructional Television Fixed Service) and satellite transmission.

The incorporation of the new technology would not have been as effective had it not had the support of the library. The new technology manifested itself as a lot of machines and gadgetry. It needed the library's expertise, procedures, and user-oriented environment to bring

the patron into a fruitful relationship with that technology. While this article has concentrated on the integrated functions and cooperative efforts of the instructional media center and the library, this is not meant to imply that the computer center has not taken an active part in the efforts toward integration. The library has benefited significantly from the advice and help of computer center personnel. The future will doubtless see much greater collaboration among the library, nonprint media center, and the computer center. Plans for installing the microcomputer lab within the library will involve computer center staff at the policy, operations, and technical levels. Such expanded services through integration enable information services to create for the campus the foundation for academic information support in the twentyfirst century. Future developments will reflect a natural shift in emphasis and a changing technology, not a shift away from the original precept—i.e., providing the best in academic support services through cooperative relationships.

ACKNOWLEDGMENT

The authors wish to acknowledge the support and assistance of a colleague, Peter Watson, in preparing this article.

References

- 1. Carnegie Commission on Higher Education. The Fourth Revolution: Instructional Technology in Higher Education. New York: McGraw-Hill, 1972, p. 34.
- 2. Recommendations of the Task Force on Instructional Media (CSU—Chico) submitted to the Educational Policies Committee on 3 April 1972, and adopted as a part of the academic Master Plan (1972-80), Section IV-C4, by the Faculty Senate on 20 April 1972.
- 3. CSU Council of Library Directors' Learning Resources Committee. "Guidelines for Learning Resources in Libraries of the California State University and Colleges Systems," draft. Los Angeles: The Committee, 1975, p. 1 (unpublished).
- 4. For a more complete discussion and examples of nonprint materials in an online public access catalog see: Hardy, Carol. "Special Formats: Nonprint." In *Online Catalog, The Inside Story*, pp. 62-68. Chico, Calif.: Ryan Research, 1983.

