

The Librarian's Role as an Educator

pitable to a broader range of materials. Commonly, such materials may include films, phonograph records, audio tapes, and other "audio-visuals." Librarians who maintain these materials in their collections have recognized the importance of information which can be stored and retrieved from non-print sources. The inclusion of non-print materials is a logical extension of the general role of the library as traditionally conceived.

Typically, librarians in this second group, whether wholly print-oriented or accepting some responsibility for housing traditional audio-visual materials, have very little concern for the production of general materials, although they may, as teachers of librarians, use any of the technologies, or they may produce a wide range of instructional materials about the library. Examples of the latter applications can be found in the *ALA Bulletin* for May, 1966.¹

Librarians in this large group, however, do not seem to consider that they have any educational role in the production of materials—print or otherwise—for the other disciplines. They would not see any part for themselves in developing a book or article about botany, for instance, and similarly would take no part in producing a film or audio tape on that subject. For this group, which probably includes a numerical majority of librarians and libraries, the librarian has no significant role as a producer of materials, except possibly of those directly related to his own specialty.

In view of the complexity of librarianship, even when it does not include a role as producer, librarians may be quite right in rejecting that role. It may very well be that to assume responsibility for the production of materials would be to extend the librarian beyond his reasonable capacity as a specialist in an already highly specialized field.

Despite what many believe a reasonable limitation on librarians in refraining from a role in the production of materials, some libraries are assuming this role, and recent literature suggests the future will see it extended.²

A notable example of a library which has assumed responsibility for some materials production is the Audio-Visual Center at Purdue University under the direction of John H. Moriarty. In addition to having a collection of audio-visual materials produced elsewhere, the Center itself produces films, slides, film strips, and audio tapes, along with correlated print materials, and provides facilities for their use. Furthermore, there is within the unit a competent research staff which

studies the effectiveness of some of the programs produced. The non-print services at the Center are not comprehensive in that they do not, for example, include a television unit nor any current plans for computer-assisted instruction. Although this lack of comprehensiveness may be partly the result of internal vested interests—an extremely complex and difficult problem for universities—it also appears to be partly the result of the pedagogical conviction, on the part of the Center's leadership and staff, that the Center should deal with materials which the individual student or professor can personally use or manipulate. Although such a philosophy rules out (for the present) some technologies such as television, it is entirely consistent with the spirit of a library.

Probably much more than a mere "straw in the wind" is the recent attention that has been given to the concept of instructional materials centers. Such centers very frequently are basically print-oriented libraries in the traditional sense, but with the highly significant difference that they will both house and produce materials. Thus in *The School Library: Facilities for Independent Study in the Secondary Schools*,³ a report issued in 1963 by the Educational Facilities Laboratories, one finds provision for the production of graphics, records and tapes, motion pictures, and television.

If librarians accept the concept of a library as a comprehensive materials center with technical facilities for materials production, they will have to prepare themselves to assume responsibility for the instructional effectiveness of that which is produced. In general, it appears that most planners of instructional materials centers do not yet quite understand the implications of this fact.

The instructional materials center concept brings what used to be a library of print-oriented materials into articulation with facilities for preparing as well as disseminating materials of all kinds. The purpose of these materials is conceived as being primarily for instruction, usually of a rather systematic nature, though one can imagine them being for research, general education, or even entertainment—in the sense that reading a book may also be entertaining. Instructional materials centers in libraries bring us to the threshold of a "great leap forward," strongly impelled by a logical analysis of the situation, into a total service of learning resources.

Learning materials and media, including print-oriented ones, are frequently best used in some optimal combination. It follows therefore that pedagogical and psychological analysis of learning tasks is needed

The Librarian's Role as an Educator

before instructional media can be designed for various aspects of these tasks. It follows further that all significant media should be available for use, and used according to the manner in which the instructional characteristics of the media relate to the instructional task and without reference to particular prejudices or enthusiasms of the staff.

The relative efficiency of various instructional resources in terms of teaching effectiveness will depend upon the manner in which the materials are prepared, presented, and used. Again, it follows that pedagogical and psychological analysis is required and that systematic research involving careful quantifiable evaluation is essential.

Thus the instructional materials center has implicit in its assumptions, but rarely made explicit or adequately planned for, not only the full range of instructional technology as techniques but, much more importantly, the underlying bases of psychology, pedagogy, and psychometrics. Without these "instructional technology" is likely to be a collection of gadgets. This concept was strongly implied by several speakers, notably C. R. Carpenter and C. Walter Stone, at a national conference held in May, 1963,⁴ on the implications of new media for teaching library science.

Rather elaborate plans for institutionalizing much of the learning resources concept, although weak in psychology and measurement, were highly publicized during the planning phases of Florida Atlantic University at Boca Raton.⁵ It is not clear at this time to what extent the announced plans are to be implemented, although it appears that much of the plan has been sharply reduced, at least for the present.

Another development of the same concept is being institutionalized rapidly at the Urbana and Chicago campuses of the University of Illinois.⁶ As a concrete example of the logical extension of an instructional materials center into a more nearly complete facility for providing instructional resources, consider the organization of the Office of Instructional Resources at the University of Illinois at Chicago Circle. It is planned to have the following functional groupings: (1) the *Instructional Systems Group*, which has the over-all function of designing strategies and developing techniques for applying psychological principles of learning to instructional programs, and (2) the *Production and Services Group*, which is charged with the responsibility of insuring that instructional strategies are carried out through well-planned and well-executed media production services. Note that the Production and Services Group provides the services frequently

associated with an instructional materials center, while the Instructional Systems Group is concerned with instructional design and evaluation. The latter service is frequently lacking in an instructional materials center.

The *Instructional Systems Group* includes the following divisions:

1. **Course Development:** Helps the faculty redesign courses by a procedure which involves carefully defining specific objectives, analyzing the structure of the discipline, devising instructional grouping and activities, selecting teaching methods and media, realigning personnel and material resources, and cooperating in the production of materials and evaluation instruments.
2. **Programmed Instruction:** Assists faculty members in writing programmed instruction for academic courses and in locating and using programmed materials from outside sources.
3. **Learning Evaluation:** Assists faculty members with test scoring, item analysis, data interpretation, test construction, and information about standardized subject matter tests.

The *Production and Services Group* includes the following divisions:

1. **Television:** Produces and distributes television presentations, and supports other uses of television in connection with departmental teaching activity.
2. **Audio-Visual:** Operates a library service for scheduling and rental arrangements, as well as for providing information about sound motion pictures, filmstrips, slides, and audio materials, and also operates a rapid service "do-it-yourself" facility for making slides, overhead transparencies, and handouts. This Division also records lectures and discussions on audio tapes, duplicates audio tapes, and operates and maintains a wide variety of projection and sound equipment.
3. **Graphic Arts:** Establishes a high level of design throughout all areas of instruction and the university academic environment by making finished art work for television-projected media; designing faculty publications, instructional exhibits and devices; and constructing models, devices, and exhibits. The Graphic Arts Division also contains a photographic department which provides a comprehensive photographic service for the campus, including still- and motion-picture photography, processing, and printing.

It is anticipated that as the technology develops further, provision

The Librarian's Role as an Educator

will be made for computer-assisted instruction and dial-access learning carrels.

The foregoing discussion should have made it clear that a complete learning resources center will require, in addition to the usual specialists for a conventional library, the following kinds of specialists: psychologists concerned with learning research and measurement; television directors, engineers, and other technicians; graphic artists; photographers and photographic technicians; computer programmers; and instructional programmers. Many of these specialists require careful selection, premium salaries, and optimum working conditions. They use costly and complex equipment. Their operating expenses are high. If an institution is to have such an organization, it must be managed carefully in order to assure internal effectiveness and meaningful articulation with the institution it serves.

Should such an organization be related to the library? Very likely, because it is an essential extension of the fundamental print-oriented learning services of the library. Students and faculty should find in the center provision for the broadest variety of instructional needs without consideration for the technology upon which it is based or the manner and place of its preparation.

Who then is to administer, plan, and supervise such a service? At Florida Atlantic University, the principal administrator was to be a media-minded individual with various specialists, including librarians, serving under him. This relationship did not last. At the University of Illinois at Chicago Circle, the Office of Instructional Resources is in the library building and articulates closely with library activities, but it is not part of the library. Its director reports to the Dean of Faculties, as does the director of the Library, and the two budgets are quite separate.

Although the question transcends the old argument of the audio-visualists who typically have not wanted to serve within library organizations, reasons for rejecting library control are cogent and should be considered. Audio-visual specialists complain that librarians—or many of them—are so print-oriented that in the inevitable struggle for space, staff, and operating budget, books always come first and what is left goes to A-V. That this is not always true is demonstrated by the fine Audio-Visual Center at Purdue, previously mentioned, but it does suggest that many librarians are wholly unfit, by reason of their predominant interests, to direct a comprehensive instructional resources facility.

The fact appears to be that, at the present time, no discipline is

preparing individuals to assume leadership of a complete instructional resources center. Indeed, the few who are now in these positions of leadership come from a variety of academic and professional experiences and are essentially self-educated for their present tasks. They are probably all only more or less adequate, considering the magnitude of the task. Indeed, no systematic analysis of the task or of its requirements exists. A few institutions have developed programs for instructional technologists which are strong in technology but relatively weak in psychology and the graduates are entirely unprepared in librarianship. Graduate schools of librarianship, on the other hand, sometimes give a smattering of psychology and an introduction to audio-visuals, but their graduates also are quite unprepared for this new specialization.

In summary, one can say that a librarian, because the library is so central to the educational process, should be prepared to function as an educator in the production, most broadly speaking, of materials for the non-print technologies. But he is not being prepared to do so at the present. Conversely, psychologists, audio-visualists, and instructional technologists are usually inadequate in librarianship, and are, therefore, not properly prepared for these important leadership roles. Thus it appears the field is wide open for enterprising colonization and probably will be occupied by those who get there first with the strongest claim to title, that is, those who are prepared to render the required service.

References

1. "Library Orientation Programs," *ALA Bulletin*, 60:435-437, May 1966.
2. Stone, Walter C. "Research and Practical Experiences of Recent Years That Support the Concept of the School Library Materials Center." In Alice Lohrer, ed., *The School Library Materials Center: Its Resources and Their Utilization* (Allerton Park Institute, No. 10). Urbana, University of Illinois Graduate School of Library Science, 1963, pp. 1-11.
3. Ellsworth, Ralph E., and Wagener, Hobart D. *The School Library: Facilities for Independent Study in the Secondary School*. New York, Educational Facilities Laboratories, 1963.
4. Goldstein, Harold, ed. *Proceedings of the National Conference on the Implications of the New Media for the Teaching of Library Science* (University of Illinois Graduate School of Library Science Monograph Series, No. 1). Urbana, University of Illinois Graduate School of Library Science, 1963.
5. Singer, Len. "Florida Atlantic University: Where Tomorrow Begins," *Audio-visual Instruction*, 8:236-242, April 1963.

The Librarian's Role as an Educator

6. McIntyre, C. J., and Haney, J. B. *Planning for Instructional Resources at a Rapidly Growing Urban University*. Chicago, University of Illinois, Office of Instructional Resources, 1967.

ADDITIONAL REFERENCES

North, Stafford. "Learning Center Gives Each Student a Study Carrel," *College and University Business*, 40:46-49, May 1966.

Melinat, Carl H., ed. *Educational Media in Libraries*. Syracuse, N.Y., School of Library Science, Syracuse University, 1963.