Trends in Higher Education Affecting the College and University Library

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THE TERM "trends" in this article is used loosely enough to include developments that have not been present during the entire period of the contemporary American university's evolution, but tightly enough to exclude temporary flurries of excitement. Not all libraries have been affected in the same manner or to the same extent by these ideas for the very obvious reason that men differ in their interpretations of the meanings of events. Further, no attempt is made to document cause and effect where the relationship is obvious and widespread.

The rapid and extensive growth of colleges and universities is perhaps the most important factor in determining the nature of the institutions. In 1900, there were 237,592 students enrolled. In 1947, there were 2,354,000.[1] This growth, itself a result of the ideas that shaped the twentieth century, has served as host for almost all the germinal developments in the modern university, the final outcome of which remains uncertain at the mid-century point.[2-5] The many reasons for this growth need no presentation or discussion in this article except for the covering statement that the universities and colleges today are somewhat analogous to the growing plant whose normal cycle is being shaped as much by imposed nutrients as by the natural products of the soil. Specifically, the effects of World War II on colleges and universities were impressive and extensive, but just how long-standing no one can say. Likewise, a sudden cessation of the threat of future wars would throw university life into immediate confusion, because at the present time no one can tell what the demands of a "normal" social order would be like.

The curriculum is both cause and effect in relation to changes in enrollment. The modern university feels a new kind of responsibility

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to the social order which leads it to spread the benefits of teaching and research over every recognizable phase of the citizen's life. The university is close to the current scene and is very sensitive to it.[6] Witness the presence of institutes and workshops for lawyers, teachers, plumbers, hotel managers, farmers, and those in other vocations in the normal life of the university, particularly those in large urban cities, or in state-supported universities.

The modern university believes that all aspects of the lives of citizens are worthy subjects for research and teaching. Hollis notes that:

> Without exception the leaders of this period [Harper, Gilman, Eliot, White and Angell] advocated a program of research and instruction calculated to minister to the everyday needs of national and community life. They were not afraid of vocational, professional, or otherwise utilitarian studies. The squeamishness that now abounds in this regard emanates largely from liberal arts teachers of undergraduates who have come to have a voice in graduate affairs in most universities. In his inaugural address Gilman sounded a note that was reiterated generally by other presidents. He promised that Johns Hopkins would make for "less misery among the poor, less ignorance in the schools, less bigotry in the Temple, less suffering in the hospital, less fraud in business, less folly in politics." He believed that the attainment of such highly practical ends called for advanced study in many subjects for which graduate research had not before been customary, even in Germany.[7]

Programs based on this kind of thinking have greatly expanded the scope of library collections until one finds a university like Illinois receiving over 17,000 periodicals currently.[8] The book collections, likewise, cover all phases of modern life from philosophy to faucets.

Changes in size and scope can be seen in the traditional liberal arts college and in the professional schools. In the former, the changes are shown in the content of the curriculum, in teaching and testing methods, and in basic attitudes of students and faculty.

First, in terms of curriculum, two opposing forces operate. One favors the humanistic tradition based on subjects that have been in the liberal arts curriculum for a long time; the other favors the introduction of professional or semi-professional courses, majors or minors. Those who defend the humanistic tradition do so under one of two banners—"liberal" or "general" education but those who favor the infusion of "professional" education use several lines of attack. Some would compress the contents of the four-year liberal arts curriculum

into a two-year general education program, followed by a strong professional major. Some would hold that the humanistic tradition is a point of view rather than a series of subjects. They would argue that "A specialized subject, taught in a liberal spirit, offers more opportunity for the intellectual and social development of the student than a general subject taught as a narrow discipline." [9]

Second, the large enrollments in the arts colleges have led to the lecture-plus-textbook method of teaching and to the development of a testing program that determines the manner in which students study. Under the lecture-textbook reading system, a large amount of information can be put into the students, but since the instructor does all the hard creative thinking in the preparation of the textbook, the method leads to a passive, receptive attitude on the part of the student, an attitude that is not conducive to the development of aggressive and lasting habits of reading.[5, 10] The professor in charge of a large class cannot take the time to grade papers that test the student's ability to think creatively and reflectively. As a substitute, so-called "objective" tests are used. These tests can be graded mechanically and quickly, and impartially. Students have learned that the best way to study for these examinations is to confine one's reading to the assignments and to do the reading shortly before the examination. This causes library use to be largely confined to a few titles and to a few days in the term. Study of attendance records in reserve rooms show this practice to be almost universal.[11] It cannot be claimed, of course, that the tests are entirely to blame.

And third, in terms of basic attitudes, although the assertions are difficult to document, two facts seem obvious: First, the impersonality of student-faculty relationships in the large classes means that students seldom are fired by a tremendous thirst for learning. Instead, they tend to assume a defensive, defiant attitude against the efforts of the faculty to teach. Second, professors pretty generally are convinced that a large percentage of the student body is either uneducable [12] or at least not interested in learning. They are sure that the quality of the students has declined.[13, 14] Others admit the unwillingness on the part of the student to learn, but attribute this not to lack of ability in the student, but to the failure of the university to offer a challenging curriculum. The two lines of thinking on this point are exemplified by the books of Robert M. Hutchins along the lines of traditional intellectualism and by Harold Benjamin's *The Saber-Tooth*

Curriculum,[15] along the lines of basing the curriculum directly on the contemporary needs of living people.

It is not necessary to take sides on the issue as to whether it is the curriculum or the ability of students that is to blame. The facts are that the professor thinks that only a small minority of his students will respond to his teaching. His skepticism toward his students is matched by theirs toward his reading assignments. Librarians, in the middle, catch the brunt of both antagonisms.

In the professional schools the effects of size and scope can be seen in the following developments:

First, qualitative standards have been raised, partly because of faculty desire for excellence and partly because of fear of an oversupply of practitioners. Both reasons plus a third, namely, a growing realization that professional men need exposure to the influence of the older humanistic disciplines, have had the effect of lengthening professional curricula. This is usually done by requiring the student to have either an A.B. or three years of study before he enters the professional school (for example, medical, law, and library schools); or, in the schools that previously had no liberal arts prerequisite, the requirement of at least one or two years of general education work. Developments in colleges of engineering illustrate the latter trend.[16] Schools like Massachusetts Institute of Technology and Illinois Institute of Technology now make arrangements with liberal arts colleges for combined liberal arts and engineering curricula.[17]

Another development in the professional school that works in the same direction, but for different reasons, is the current interest in the social consequences of the profession's activity. This usually leads to courses in the ethics of the particular profession, or it leads to having the students take courses in the liberal arts college that accomplish the same purpose.

These developments of a standards-raising nature have a direct bearing on library use. They make the difference between a student who reads widely and one who does not. They also determine the scope of the collection that will be required in the professional school library.

Looking directly now at students, faculty, and administrators in colleges or universities, one can define a few characteristics of each group that are different from what they were a generation ago, and different in a way that shows up in library use.

First, the students. Although it may be true that the decline in the use of close reading practices may cause students to become careless

in their attention to detail, the point is debatable. But there can be no doubt of the ability of present day students to work with complex and sophisticated library collections in a manner that was impossible among undergraduate students a generation ago. The rapid growth of elementary and secondary school libraries, the development of methods of teaching in the schools based on a respect for the minds of youngsters, plus a growing interest in improved teaching methods in the colleges have all been responsible.

It has been observed time and time again that after World War II college students took their work more seriously than did their predecessors. Some of this was due to the fact that many were married and thus more stable, some to the realization that good grades opened up channels of advancement in the armed services not open to poor students, and some to the realization that they must hurry to make up for time lost in the Services. Regardless of the reason, post-war students used libraries in a manner that gladdened the hearts of librarians and professors.

Second, the faculty. The present generation of faculty did their graduate work under teachers many of whom had done their graduate work in Europe, and who could read foreign languages readily. Many of the present generation cannot. This fact may have more to do with the trend toward abolishing foreign languages as a research tool than any one will admit. University libraries today are receiving more material written in foreign languages than they ever did in the past. The number of scholars able to read these has declined. (The author cannot prove this, as a general statement, but knows that it applies to certain departments in several universities, and suspects that it is true generally.) The fact that the abstracting tools in a scholar's subject fail to list articles and books in other languages is accepted by him as proof that the latter do not exist.

Most faculty members today cannot afford to build personal libraries and they expect the university library to supply their book and journal needs. Thus, collections are sometimes built to satisfy the personal needs of a professor as well as to strengthen an area of scholarship.

The professor today knows that promotion and recognition depend on quantity and quality of publication, above all else. Administrators no longer know how to identify good teaching, and hence cannot use it as a basis for promotion. Thus it is that a great deal of faculty publication rests on research done under forced draft conditions and

for ulterior motives. Such work bothers the consciences of the professors and clutters up the journal files.[18]

Third, the administrator is no longer a professor drafted to the task. He is a professional who has had special training in his own work. This professionalism creates a barrier between him and the faculty, which results in an anti-administration attitude on the part of the faculty and a feeling of insecurity and frustration on the part of the administrator.

That the administration of universities has become bureaucratic is undeniable, as is the fact that it takes a larger percentage of the university's income than it did thirty years ago. In 1932, all colleges and universities in the United States spent 19 per cent as much for administration and general expenses as for resident instruction. In 1948, the same institutions spent 26 per cent as much for administration and general expenses as for resident instruction.[19] Whether this increase is due to the introduction of labor saving machines, modern accounting practices, mere size of institution, or the desire of the administrations to justify their own activities is a matter of dispute. The fact is that there is a traditional antagonism between faculties and administrators; and librarians, whether they deserve it or not, are usually grouped with the administration, even though they think of themselves as belonging on the other side of the fence.

Within the framework of knowledge itself there are developments that are significant to libraries.

First, the trend toward specialization and departmentalization, or the fragmentation of knowledge, continues in spite of such cries of protest as the following:

> Departmentalization in our universities is a natural result of orderly technical progression in complex scientific studies. To some degree we require it still and shall long require it. When it comes to *meanings*, however, it will be a detriment if overdone. . . . The narrow specialist of today is not even a good specialist.[20]

> The excessive departmentalization of the twenties and thirties led in the forties to a search for curricula that would result in general understanding. Common to all discussions around the theme of general education one always finds that in the older departmentalized curricula there is a lack of a common intellectual experience shared by all college students. Faculties debating the problem usually find it

possible to agree that this lack exists, though seldom can they agree on a sensible way of filling the gap.

Divisional area study and other forms of multidepartmental curricula have evolved to compensate for some of the weaknesses of excessive departmentalization. Examples are the Program in American Studies at the University of Minnesota; The Northwestern University African Study Center; and Program in Russian Studies, Cornell University. Almost every college or university has at least one.

Then there are internal shifts in the relationships among areas of knowledge which cause whole departments to be moved, even in a physical sense. Psychology, originally a part of philosophy, has become completely independent, but with new leanings toward biology, mathematics, and medicine. Biochemistry in many universities is now a part of the medical school. Chemical engineering is now, in most universities, a department in the engineering division, even though in a physical sense it may be still located in the chemistry department.

Where the tides of change have left a department stranded, a new emphasis within the department sometimes causes a rebirth of interest. Thus in the classics departments, interest in studying the Greek and Latin language and literature has almost disappeared, but these departments have shifted to teaching and research in the civilization of Greece and Rome—a broader kind of ancient history. The work is done in the English language and is sometimes presented by both the classics and history departments.

A more general shift—the decline of the humanities—has been going on for thirty years or more.[21] Sigerist says:

The humanities, and to a certain extent the social sciences also, became the stepchildren of the university. The trend was toward utilitarianism. Philosophy, the mother of all sciences and the connecting link between them all, was pushed into the background.[22]

Attempts to revive the power and influence of the humanities through conferences at universities (Stanford, Toronto, and Colorado) have had the effect of stimulating those who were already believers, but little else.[21] Meanwhile, librarians observe that a major share of their book and journal funds are continuing to be spent for the humanities even though these subjects are losing their place in the academic scene. Librarians soon may well need guidance and instruction from the faculty on this point.

Much has been said about the use of audio-visual aids in higher

education and their importance is obvious. A few universities, as, for example, Oregon and Purdue, have seen the wisdom of keeping the development of these tools related to the book, picture, and journal so that funds will be properly divided among them and so that no one medium will suffer from neglect or lack of availability of the others. The State University of Iowa has gone so far as to label an area of the campus as the Communications Center. In the center is the central library, flanked on one side by the journalism building and the broadcasting station, and on the other by the site of a proposed television studio.

Western Reserve University is now giving full credit for home study by television,[23] and the University of Louisville and the Louisville Public Library have experimented with television in so-called "neighborhood colleges" with branches of the public library system as the centers. Transcontinental broadcasting by television of an actual surgical operation has already been accomplished.

The academic future of this communication device seems of great importance, especially if all agencies interested in education can learn to pool their talents and facilities and thus discover the strength of each in combination with the others.

Within the graduate colleges there are several developments that are relevant.

First there is the rapid decline of the university graduate college as a place where research is done. Before 1918, there were few governmental or industrial research laboratories. In 1941 there were 2,264 industrial research laboratories with over 44,900 full-time employees; whereas there were only 1,000 universities doing research (only 300 of any size) involving about 10,000 persons, many of them only part-time.[24] The development of the special libraries field is clear-cut evidence of the trend. Many large industries have built their own research laboratories since World War II (Bell Telephone laboratories in New Jersey, General Motors Corporation, Maytag Washing Machine Company, etc.). Sometimes these are located on the campus of a university (e.g., the Meat Research Institute on the campus of the University of Chicago).

During World War II some of the finest talent in the country was placed in the Office of Scientific Research and Development to stimulate and coordinate research necessary to win the war.[25] Today the Office of Naval Research distributes microcard reproductions of research materials to scientists in the field with whom it has research

contracts. The Atomic Energy Commission maintains a bibliographic service for its participants that goes far beyond the levels of help any researcher in a university would expect to receive.

These are indicative of the direction in which scientific research is moving. What this will eventually mean to the universities one cannot say. It may be that university scientists will have to do less research themselves and spend more time training others.[26]

But for libraries, the trend is clear. Scientific libraries will be for fundamental research in science; industrial libraries will need, in addition, the literature of applied science.

Second, the rapid growth of the graduate school (562 Ph.D.'s granted in 1918 [27] and 6,510 in 1949/50 [28]) has resulted in a flood of dissertations that place a very heavy publication load on the already overburdened subject journals. This load became so clear to librarians that in February of 1952 the Association of Research Libraries adopted a plan for the development of a new bibliographic control and abstracting tool for doctoral dissertations.[29] This plan provides for micropublication of the full texts of dissertations and for the expansion of *Microfilm Abstracts*. It will relieve subject journals of the necessity of publishing articles based on dissertations. This is important because, in almost all areas, the journals are so oversupplied with articles that delays in publication are becoming serious.[30]

Third, over thirty years ago, a midwestern university began giving advanced degrees for graduate work in literature and the fine arts with a "creative" thesis in the form of a painting, poem, novel, musical composition, drama, or stage design, instead of the usual thesis. This is no longer considered extreme heresy among universities. Two give Ph.D.'s and many give the master's degree for creative work. The library resources necessary for this type of research are much smaller than those needed by departments that use the traditional approach entirely.

Fourth, the infiltration of scientific methods into the social sciences and humanities through the use of statistical and laboratory methods causes the researcher to rely less on evidence from printed sources and more on data taken from the field or the laboratory, and a shift in publication outlet from the book to the journal article takes place.

Fifth, the method of comparative analysis in the social sciences, with anthropology occupying a pivotal role, calls for the use of a wide range of printed materials not formerly needed.[31] The anthropologist draws his data from all subject fields in the areas he is studying. The drudgery

involved in tracing down and assembling the publications is considerable in the typical university library. Extension of the comparative method in the social sciences and humanities will probably lead to the development of a tool similar to, or better than, the Human Relations Area Files.

The accrediting associations in the twentieth century have played an important role in raising standards of academic personnel, and graduate study. This influence is well understood. Perhaps it can be said that accrediting associations are particularly successful in the early years of an institution, but once the schools they nursed through early years are stabilized, the associations tend to become a nuisance, fretting about minor provisions. In a period of stable or declining income, they can, by insisting on a certain minimum of support, cause a university to deal unfairly with departments that do not have accrediting associations behind them.

The last trend to be considered will be the efforts of colleges and universities in various regions to improve the quantity and quality of their services through regional cooperation.

The southeastern states have gone farthest in this direction. The governors have created a Board of Control for Southern Regional Education [32] that is allocating responsibility for developing training and research centers among the various institutions in the regions. The graduate deans and librarians in the southeast are approaching their tasks in the same spirit, as is evidenced in the following statement of Pierson's:

> In this brief account of these distinctive movements in Southern University libraries; namely, the building up of manuscripts and original source materials in special areas by certain institutions, the emergence of cooperative University centers and the interlocking administration of graduate schools and libraries, it is seen that southern institutions are attempting to use their limited resources to the best advantage.[33]

Other parts of the country have also attempted to make limited incomes go further by cooperation. New England has tried it in public health education,[34] and the Rocky Mountain states have done the same for medical education.[35] Inter-institutional cooperation is an old story to university librarians, and they are aware of its advantages when the conditions are favorable and the right spirit exists.

In summary, the modern colleges and universities reflect the instability and changing character of the social order out of which they

grow. The rapid growth of the university, the drastic adaptations made by universities during the last two World Wars, the vast extension of scientific method, and the sudden development of the United States as a major world power all shape the nature of the modern university. It is from these forces that library programs and practices evolve.

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