The Coordinated Collection and Individual Use of Library Statistics

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The 20th century emphasis on numerical findings is probably related to the exactness, pervasiveness, and wider acceptance of science; the continuous expansion of population, industrial and agricultural production and marketing; and the receding horizons which have stretched from national to global, and now to interstellar proportions. As our activities and frames of reference are extended, our need to comprehend them makes the statistical method increasingly useful.

Mere arithmetical counting of populations is as old as the need of governments to administer, to tax, and to recruit. Only in the late eighteenth and in the nineteenth centuries were the means, resources, and insights available to give rise to the social survey movement which in turn gave considerable impetus to the development of the statistical method. John Howard, in his study of British prisons, may have been the first to conduct the type of research which pointed the way for men like Charles Booth, who is usually credited with having designed the first social survey. Howard used his findings in testimony before the House of Commons in 1774, which led to prison reform legislation. Booth conducted his extensive surveys to study “the numerical relation which poverty, misery, and depravity bear to the regular earnings and comparative comfort and to describe the general conditions under which each class lives.”

Among the various research methods, statistics, in providing systematic quantitative expressions of observed phenomena, serve descriptive and analytic purposes. Through measurements and summarizations they assist such diverse fields as biology, chemistry, psychology, sociology, business, economics, education, and librarianship. By means of induction and analysis, inferences can be drawn

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which provide conclusions about unobserved or unobservable phenomena. Through methods such as sampling it becomes possible to draw conclusions concerning larger than observed universes, or to project with definable precision into the future and thereby arrive tentatively at evaluations of as yet unobservable phenomena.

Statistics can describe concrete conditions and performance of social institutions such as libraries, in terms of human and physical resources and facilities. They permit comparisons of the same or similar units over a given period of time. They can indicate shortcomings and gaps and enable us to put a dollar figure on the needs for remedies. Statistics are essential tools of dynamic administration, means of evaluation, springboards for planning, and the foundation on which budgeting and legislation should be based. To be valid, statistics require data which are reliable, clearly defined, uniform, and comparable. For legislative and budgetary purposes they should also be timely.

Statistics and Librarianship

In the American library field the effect of the population explosion of the last quarter century is reinforced by the expansion of knowledge and literacy which is responsible for increased research activities and has resulted in a publications explosion which forces upon us continuous revision of concepts of bibliographic containment. As a consequence, we are witnessing a paradox whereby the population and publication explosions combine to reduce the literacy potential by making it increasingly difficult to render adequate service at a time when it is urgently needed.

Due to these factors, the need for all types of libraries has increased sharply, creating shortages of finances, manpower, and physical facilities. If relief is to be provided for this national problem, it will have to be nationally observed, described, and analyzed. Inferences will have to be drawn not only nationally, but also statewide and locally, and brought to the attention of the public at large, administrators, and legislators on the national, state, and local scenes. For this reason, statistics will have to be compatible and comparable for our three jurisdictional levels. Geographic factors may make it desirable to study service patterns which would involve regional constellations and possibly lead to interstate compacts—a fourth jurisdictional level.

In order to assess the recurring statistical library surveys which are
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carried on the state, regional, or national level, the Library Services Branch of the U.S. Office of Education published in 1961 Statistics of Libraries: An Annotated Bibliography (OE-15022) which was compiled by John Carson Rather and Nathan M. Cohen. It cites 156 up-to-date statistical surveys which had been compiled and published in 1960-61. Of these 156 surveys, 30 per cent cover the nation or various regions, 70 per cent cover the individual states. Almost 40 per cent are conducted by state education agencies, 30 per cent by state library agencies, and nearly 15 per cent by the U.S. Office of Education. The remaining 16 per cent are distributed among national education and library associations (6.4 per cent), state library associations (0.6 per cent), academic institutions (3.8 per cent), individual public libraries (2.6 per cent), and private sponsors (2.6 per cent). Thirty-five per cent of these surveys cover public libraries, 28 per cent school libraries, 20 per cent college and university libraries, 8.5 per cent special libraries, 5.5 per cent library schools and training, and 1.5 per cent general topics. State education and library agencies are the most frequent sponsors of such surveys because they frequently have the legal responsibility for undertaking them for school and public libraries. Similarly, the act which brought the U.S. Office of Education into existence in 1867 made the conducting of statistical surveys on education mandatory.

In the surveys undertaken by state agencies, public and public school libraries are well covered; academic library surveys frequently omit institutions under private control; special libraries and nonpublic elementary and secondary schools are very inadequately covered. State, regional, and, by and large, national surveys give information of very similar, but not comparable, nature because the definitions on which the surveys are based are not identical and the survey periods differ. As a result the respondents, the individual librarians, have to fill out various forms, creating a duplication of labor. This is paradoxical because the data which are essential for administrative, budgetary, legislative, and informational purposes are with few exceptions identical. Actually the data are of three kinds: those dealing with fiscal aspects, with resources, and with performance and use. In the first two areas there are only small differences between states and also between types of libraries, indicating that the potential for comparability is high. The measuring of performance is most difficult because “use” questions concerning circulation, registration of borrowers, or the answering of reference questions are considered in-
creasingly inadequate yardsticks; they are still used because better use indexes have remained unexplored.

**Foundations for a National Library Statistics System**

In surveying the library situation in 1950, Robert D. Leigh stated that “... the United States has a multitude of libraries, some of them magnificent institutions, but it has no library system. It falls far short of providing the people everywhere equal access to the means of learning through the reading of books.” Little has happened during the intervening years to challenge this statement except for the increased awareness of this situation among librarians. Library cooperation which took the form of union catalogs, bibliographic centers, the Farmington Plan, inter-library loan exchange arrangements, or the creation of the Midwest Inter-Library Center is significant; but these developments will have to be implemented by nationwide coordination which could bring about adequacy of service. That increased efforts along these lines are essential was recognized by James Bryant, when, during the annual American Library Association conference in 1963, he focused the profession's attention on the student-use problem in library service. This conference made it evident that cooperation will have to give way to the wider concept of integrated inter-library service which would require the establishment of statewide systems through amalgamation, contract, merger, statewide coordination, and other means which are now being contemplated in New York, New Jersey, and other states.

Such changes would not necessarily or permanently require largely increased funds, but they would amount to a major legal effort resulting in the scaling of jurisdictional barriers and the transfer of public funds in accordance with population movements across the city, county, and possibly even state lines in relation to demonstrated users' needs. As Robert Leigh indicated, this changeover “... would make for complete coverage of the population and would come nearer to equality of service to the whole public,” but it “... would involve elaborate arrangements for priorities, allocations, and exchange between the libraries of a community or region.” It would also require careful arrangements which would not loosen the ties of a library and its local allegiance and support while extending its coverage in various directions. A nationwide library statistics system would pave the way and would have to precede the formation of a library opera-
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ations system because it would provide the foundation on which it could rest.
Regardless of the actual formation of an operations system, the statistics system would have the advantages of economy for the surveyors, the elimination of duplication of efforts for the respondents, and comparability of data on the local, state, regional, and national levels. To accomplish this aim, the collection of statistical information would have to be:

1. A shared responsibility among individual libraries, state library and education agencies, and the U.S. Office of Education;

2. Based on identical definitions and terminology and measurement criteria to permit uniformity and comparability;

3. Based on the cooperation of various national and state library associations to assure validity and reliability for their use as well as for the use of administrators and legislators at various jurisdictions in the several states;

4. Assured of the guidance and assistance of statisticians on the state and national levels;

5. Assured of sufficient flexibility to permit states or regions to add requests for information which are of importance only in their particular jurisdictions;

6. Timed according to a schedule suitable for all or a majority of the states; and,

7. Sufficiently useful to compensate the participants for their efforts, to permit each state agency to have all data available for its own use, and to provide the opportunity to compare itself meaningfully with the developments in all other states.

During its July 1963 annual conference, the American Library Association adopted the Standards for Library Functions at the State Level. Two paragraphs of these standards are directly related to the concepts of the establishment of a statistics system and its implementation and read as follows:

The state should gather and publish annual statistics on libraries in the state—public, school, academic, special, and including state library agencies themselves—and should provide central information about the library resources of the state.

Statistics are an ingredient in state development and planning for
which state library agencies have a direct responsibility. This responsibility, and the requirement that libraries furnish information, should be written into state law. It should be possible within every state to turn to state government for information about all library resources in the state. The annual information should be analyzed by state agencies to determine trends and needs in library service. The analysis should be distributed to all libraries, library groups, and appropriate government offices as an aid in planning activities. The gathering and tabulating of library statistics should be done in conjunction with other agencies of government that have data equipment.

The annual statistics gathered by the several states should be designed to provide a common core of data among the states and for the nation.

To provide the information needed for research and library development at the local, state, and national levels, the state library agencies should collect and publish data comparable among the states. This in turn will provide useful national information. The statistical programs should be coordinated with that of the U.S. Office of Education, which has responsibility for nation-wide library data. Comparability can be obtained by agreement among the library agencies of the various states on common statistical definitions.\(^6\)

The following steps have already been taken to bring about, for library statistics, the kind of system which Webster defines as "a complex unit formed of many often diverse parts subject to a common plan or serving a common purpose; an aggregation or assemblage of objects joined in regular interaction or interdependence."

1. During the last five years the American Library Association and Special Library Association created, in response to the Library Services Branch request, statistics committees which have given invaluable advisory service.

2. During the last three years the state library and education agencies have cooperated in the distribution and collection of questionnaires (i.e., in 1961 and 1963, education agencies distributed our public school library survey forms; in 1962, 48 state library agencies distributed and collected our public library questionnaires; in 1963, 48 state library or education agencies distributed and will collect college and university library questionnaires).

3. Over the last three years, committees of the American Library Association, Special Libraries Association, Pacific Northwest Li-
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Library Association, and American Standards Association worked on a project which will provide the library profession with standardized definitions and terminology in the fields of public, school, academic, and special libraries.

4. Over the last three years the Assistant Director of the Library Services Branch and the Director of the Statistics Field Services Branch of the U.S. Office of Education held one-day meetings in Wisconsin, Minnesota, New York, New Jersey, California, Oregon, Washington, Maryland, North Carolina, Georgia, Florida, Alabama, Mississippi, Oklahoma, Iowa, Colorado, Texas, Arkansas, Missouri, and Illinois to discuss the possibilities of a statistics system and to indicate the funds and/or use of equipment available for data processing of library statistics as a permissible but not mandatory provision of Section 1009 of Title X of the National Defense Education Act. Consequently, a number of states were assisted in the transition of their library statistical operations from manual to machine tabulation techniques.

The cooperation between state agencies and the U.S. Office of Education has taken the following form:

1. Questionnaires were drawn up with the advice of respective committees of the American Library Association and Special Libraries Association.

2. Questionnaires were mailed, in the case of the 1962 Public Library Survey and the 1963 College and University Library Survey, to the state agencies, which forwarded three questionnaires to each respondent in the state—one to keep for its files, one to be returned to the state agency, one to reach the Office of Education.

3. Machine tabulations for each state were sent to the respective state agencies.

4. Punched IBM cards for each responding library were sent to the respective state agencies.

This procedure permitted each state to add additional questions, make its own tabulations at the time the questionnaires were received from the respondents, publish this information either from its own or from Office of Education machine tabulations and printout prior to Office of Education release, engage in additional exploitation of data directly from IBM cards, prepare through IBM cards annual
comparisons for the state, and prepare through IBM cards comparisons of its state with the national development in this particular area of librarianship.

In August 1963, the Council on Library Resources released information concerning the establishment of the Library Statistics Coordinating Project by the American Library Association. The release states:

... overall purpose of the project is the coordination of statistics of academic, public, school, and special libraries on the national, regional, state, and local levels.

Plans call for the compilation of a list of cooperating organizations which would be called upon to take an active part in the study; compilation of a check list of basic items and useful classifications in each statistical field; canvassing to refine the list of basic items and to obtain variations in definitions used for the items, and to eliminate duplication of items among types of libraries; and compilation of terms and definitions for the refined list of basic items.

Plans call for the development of a handbook, to be published, and an operating national program of library statistics. The completion of this project should substantially advance the creation of a nationwide library statistics system since it would assure the use of uniform terminology and definitions.

Closing the Information Gap

It should not be left unsaid that the dearth of information concerning special libraries will now be filled because the Library Services Branch has started on a new series of surveys of special libraries which is planned to be conducted through the same federal-state cooperative framework. In addition, surveys are now being planned by the Office of Education in the areas of public library service to children and young adults, the aging, and school library service in non-public schools.

With continued assistance from state library and education agencies, it can now be concluded that Federal-State library cooperation, which had its beginnings with the Library Services Act, has matured within a decade into a statistics coordination phase. This development has made the creation of an informal, voluntary, nationwide statistics system possible.

A look into the future would lead one to believe that the next phase will see the creation of a nationwide library operations system which
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would in all likelihood consist of two steps. The first would probably be the establishment of several statewide research library systems in some of the more populous states, and the second would consist of their cooperation with our national libraries such as the Library of Congress, the National Library of Medicine, and the National Agricultural Library. Automation, electronic communication, and increasing pressures for quality education will assist in surmounting the still formidable barriers to such complex activities. It would be useless to attempt to pinpoint these developments in time but it seems safe to assume that these efforts will rest on the foundations of the statistical and research coordination which is now coming into existence.

U.S. Commissioner of Education Francis Keppel has emphasized the need for research in education to improve our schools. Using his statement, but applying it to libraries, we may say that libraries have long served research; now let research serve libraries. It is not a matter of whether, through research, we can prove that our libraries are better, but whether, through research and implementation, we can make them good enough.

References

5. Ibid., p. 74.