A Statistical Overview of Children's and Youth Services

by Robert Burgin

tatistics have traditionally been used by librarians in a wide range of activities: to support local budget requests and to evaluate local services; to support requests for funding and legislation at the state and national levels; and to compare performance among libraries. With demands for accountability increasing and with funding becoming more difficult to obtain, statistics may play an even more important role in the planning, funding, and evaluation of library services. Nowhere is the need to collect and use statis-

tics more apparent than in youth services, which have often been underfunded relative to their contribution to total library services.¹.

The purpose of this article is to identify and assess efforts to collect statistics on youth services at the state and national levels and to suggest some ways in which the collection and use of these statistics might be improved. Ef-

forts in both public libraries and school library media centers will be considered.

Public Library Statistics: State Level

The collection of annual statistics for public libraries in North Carolina is the responsibility of the Department of Cultural Resources, Division of the State Library. The State Library publishes an annual report based on these statistics, with the data also available in machine-readable form. The State Library currently collects the following statistics relating to youth services in public libraries in North Carolina: book volumes of juvenile fiction and nonfiction; number of registered juvenile users; number of juvenile users registered in the last year; book circulation of juvenile fiction and nonfiction; number of programs held for juveniles; and number of juveniles attending programs.

North Carolina's statewide data collection efforts in this area appear to be better than those of most state agencies, according to a recent survey by Kathleen Garland.² Like North Carolina's State Library, the majority of state agencies (64.7 percent) collect juvenile circulation statistics. However, the other youth services statistics collected by the State Library of North Carolina are gathered by fewer than half of the state agencies: only 35.5 per-

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> cent collect juvenile program statistics; only 25.5 percent collect juvenile holdings statistics; and only 19.6 percent collect information on the number of registered juvenile borrowers.

Public Library Statistics: National Level

— National Center for Education Statistics (NCES). The Hawkins-Stafford Elementary and Secondary School Improvement Amendments of 1988 (PL 100-297) mandate that the National Center for Education Statistics of the U.S. Department of Education be responsible for collecting and disseminating statistical information on public, academic, and school libraries.

In 1990 the NCES published the results of the first national survey of children's services and resources in public libraries in the United States. While the NCES had sporadically conducted previous surveys of public library services, these had not included statistics on services to children since the 1955-56 survey. *Services and Resources for Children in Public Libraries, 1988-89* includes data from 773 respondents to questionnaires mailed in late March 1989.³ Statistics are reported for staff characteristics (for example, the percentage of respondents with public service and children's librarians at three levels of education and the percentage having a

children's coordinator or consultant available), use of services by children (for example, the percentage of users fourteen years of age and under in a typical week and the percentage of respondents with moderate or heavy use of readers advisory, book lists, summer reading programs, and story hours in the last twelve months), and group and cooperative activi-

ties. All tables are broken down by library patrons per week, type of library (main library vs. branch library), whether the library has a children's librarian, hours open per week, the percentage of the book budget used for children's books, and the percentage of total circulation accounted for by children's materials. The survey collected data from individual library *buildings* as opposed to library *systems*, and this fact (plus its reliance on mean figures to represent averages, rather than the more appropriate median figures) should be kept in mind when using its findings.

In 1988 the NCES also published a study of young adult services in public libraries.⁴ As with the survey on children's services, data were collected from individual library buildings. The young adult

report is based on 794 respondents to a questionnaire sent out in September 1987, and includes a number of statistical tables broken down by patrons per week, type of library, whether the library has a young adult section, and whether the library has a young adult librarian. Statistics are reported for collections (for example, the percentage having a young adult collection and the composition of that collection), staff characteristics (for example, the percentage of respondents having a young adult coordinator or consultant available), use of services by young adults (for example, the percentage of respondents with moderate or heavy use of readers advisory, study space, book lists, college or career information, and personal computers), and cooperative activities.

While the statistics presented in the two NCES reports on children's and young adult services are valuable, they are also out of date, being based on 1989 and 1987 surveys, respectively. There appear to be some plans for another NCES survey on children's services, and young adult services may also be included in that study.

- Federal State Cooperative System for Public Library Data (FSCS). In addition to the mandate that the NCES collect library statistics, the 1988 Hawkins-Stafford amendments also note the need for a nationwide cooperative system to collect public library data. Consequently, the Federal State Cooperative System for Public Library Data was established to allow state agencies to submit public library data to the NCES. The first report of the FSCS, based on data from all fifty states and the District of Columbia, was published in April 1991, and subsequent annual reports have been released.5 These reports provide summary data from all public libraries in the United States (over 8900 libraries); state breakdowns and breakdowns by population served are included in statistics on public library collections, services, staffing, income, and expenditures. Data are also available in machine-readable form. In North Carolina, for example, they are accessible via the State Library's North Carolina Information Network.

In spite of the value of its reports, the FSCS failed to collect statistics related to youth services in its first two surveys. However, the FSCS did collect two specific children's statistics (circulation of children's materials and attendance at children's programs) in its most recently completed survey and will report on these in its 1993 report.

— *Public Library Data Service (PLDS).* The Public Library Association's Public

Library Data Service collects data from public libraries that volunteer to participate in an annual survey. These data are then published in annual reports. In 1991 the PLDS survey included a series of questions related to children's services: juvenile holdings; juvenile materials budget; juvenile population served (under five years of age, five years through fourteen years of age) juvenile materials circulation; and juvenile program attendance. The report of the survey, Public Library Data Service Statistical Report '91, lists these statistics and statistics derived from them (for example, turnover for juvenile collections) for 562 respondents. Tables include lists of individual libraries in order by population served and summary tables based on service population, which present mean figures as well as ranges and quartile figures.6

The value of the PLDS report lies in its focus on output measures, which encourage libraries to measure their performance in terms of services (outputs) rather than resources (inputs). Output measures are an important component in the Public Library Association's Public Library Development Program, an attempt to assist public libraries in planning and evaluation, and their collection and use should be encouraged. However, when using the data, one must remember that coverage for the PLDS surveys is more comprehensive for larger libraries: over 80 percent of public libraries serving populations of 100,000 or more participated in the 1991 survey. Consequently, while the 1991 PLDS report provides a valuable picture of children's services in public libraries and is especially commendable for its use of output measures, its failure to provide more thorough coverage of smaller libraries skews its portrayal of these services. As Douglas Zweizig points out in a forthcoming article, "Since the great majority of libraries serve smaller communities, our understanding of those libraries and their services would be aided if more of the smaller libraries would participate in the PLDS data collection."7

It is also important to note that, except for the 1991 survey, the PLDS has done little to gather data related to children's services. Its 1990 report is typical in reporting only three data elements in this area: the percentage of the library's service population that is under five years of age; the percentage of the population that is five to seventeen years of age; and an indication of which libraries view their primary or secondary role as that of the "preschoolers' door to learning."⁸

- Output Measures. While not a source

of data as such, the recently published output measures for children deserve mention here as an important tool in guiding the collection of statistics for youth services at the local, state, and national levels.9 As noted earlier, output measures represent a component of the Public Library Association's attempt to assist public libraries in planning and evaluation and differ from traditional library standards in encouraging libraries to measure their performance in terms of services (outputs) rather than resources (inputs). While input measures like juvenile volumes per capita reflect the resources that a library has, output measures like juvenile circulation per capita reflect what a library is doing with what it has.

Output Measures for Public Library Service to Children should be viewed as a companion volume to the earlier Output Measures for Public Libraries and includes the following measures: children's library visits per child; building use by children; furniture/equipment use by children; circulation of children's materials per child; in-library use of children's materials per child: turnover rate of children's materials; children's fill rate; homework fill rate; picture book fill rate; children's information transactions per child; children's information transaction completion rate; children's program attendance per child; class visit rate; child care center contact rate; and annual number of community contacts. For each measure, instructions are given for collecting the data, computing the measure, and using and interpreting the results.

School Library Media Center Statistics: State Level

According to an official in the Division of Media and Technical Services of the State Department of Public Instruction, that department does not collect data on school library media centers in North Carolina on a regular basis. The decision to discontinue such data collection efforts was apparently made in the mid-1980s in response to the government's Paperwork Reduction Act. The department does, however, gather statistics on specific areas from time to time. At the present time, for example, the department is attempting to collect data on the number of professional librarians in media centers in the state. Many local school library media centers and school systems collect statistics on an individual basis, primarily for budget justification, and there is also some local collection of statistics for accreditation reports. Nevertheless, regular statewide efforts to collect data on school library media centers in North Carolina are non-

existent.

Unfortunately, it appears that North Carolina's failure to collect statistics on school library media centers regularly is not atypical. Kathleen Garland's recent survey of forty-nine state education agencies found that almost half (twenty-four states) did not regularly collect school library media centers data.¹⁰

School Library Media Center Statistics: National Level

- National Center for Education Statistics (NCES). As noted above, the National Center for Education Statistics is responsible for the collection and dissemination of statistical information on public, academic, and school libraries. The most recently completed government survey of school library media centers nationwide was conducted by the NCES in 1985 and 1986 using a nationally representative sample of 4500 public and 1700 private schools.11 Responses were received from 92 percent of the public schools surveyed and 86 percent of the private schools surveyed. The report includes data on staff, collections, facilities, equipment, and expenditures. In addition, the survey included descriptions of twenty-two different services (ranging from the traditional, such as assisting students in locating information, to newer ones, such as coordinating video production activities in the school) that might be offered by media centers, and asked respondents to state how frequently each service was provided - routinely, occasionally, or not at all.

The NCES report of the 1985-1986 survey presents statistics for public schools by school level and size; public schools by state; and private schools by level, orientation, and size. The report also includes a number of historical comparisons between that study and earlier surveys in 1958, 1962, 1974, and 1978, thus providing a record of the change in school library media center characteristics. In spite of the fact that its statistics are badly out-ofdate and in spite of its reliance on mean figures rather than median figures, the study does represent the last comprehensive national survey of school library media centers conducted by the federal government.

In 1991 the NCES collected a small amount of data on school library media centers from a sample of schools taking part in their 1990-1991 Schools and Staffing Survey. The data collected focused primarily on staff, but the results have yet to be released. In 1991 the NCES also fieldtested two more comprehensive survey instruments for school library media centers. These will be used as part of the 1994 Schools and Staffing Survey, and the data should be ready in 1995 or 1996. The survey is intended to be repeated every four years and should provide a nation-wide profile of school library media specialists, collections, expenditures, technology, and service.¹²

- Information Power. The results of the 1985-1986 NCES survey were used to define the guidelines for school library media centers reported in Appendix A of Information Power: Guidelines for School Library Media Programs, where the characteristics of high service programs are listed.13 "High service programs" are defined as those providing a high level of service based on the 22 services listed on the 1985-1986 survey instrument, and separate tables are provided for different school levels and student body size: elementary schools under 500; elementary schools over 500; middle/junior high schools under 500; middle/junior high schools over 500; high schools under 500; high schools between 500 and 1000; and high schools over 1000. Finally, the characteristics of high service programs in the areas of staff, collection, facilities and equipment, and budget are listed for each school level and

student body size at 3 different percentile levels: 75th, 90th, and 95th. For example, for high service programs in elementary schools with fewer than 500 students, the approximate collection size was 9,227 volumes at the 75th percentile level; 11,117 volumes at the 90th percentile level; and 12,809 volumes at the 95th percentile level.

These characteristics are included "so that

individual school library media specialists may compare their program resources and activities with those of schools identified as high-service providers."¹⁴ While these quantitative guidelines may be useful, three concerns should be kept in mind when consulting them. First, as the authors of *Information Power* point out, "the tables show only the characteristics of programs that deliver high levels of service and not the whole range of current practice."15 The data represent the highest levels achieved by the top school library media centers and may therefore be of little realistic use to the average or less than average school library media centers.¹⁶ Second, the guidelines reported in Appendix A of Information Power are based on input measures only: number of staff, size of collections, and the like. There are no output measures even though, as we saw above with public libraries, such measures encourage libraries to focus on services rather than on resources. Finally, the information is now over seven years old; the guidelines are based on public school data gathered in the fall of 1985 that badly needs updating.

— *Miller and Schontz.* The most up-todate national statistics on school library media centers are provided by the biennial reports of Marilyn Miller and Marilyn Schontz in *School Library Journal*. The most recently published report covers fiscal year 1989-1990, and is based on over eight hundred responses to a survey mailed to a systematic random sample of school-based subscribers to *School Library Journal*.¹⁷ Two dozen tables outline data on collections,

Youth services librarians should know the levels of support being provided in their libraries and should be able to compare their local support with typical levels of support in comparable libraries, both statewide and nationally. expenditures, technology, and network participation. Both medians and means are provided for each data element, and breakdowns by school level, geographic region, and school enrollment are included.

Miller and Schontz, like *Information Power*, provide data primarily on input measures such as size of collections and expenditures and largely ignore output measures that reflect the extent of collection use. However, they do furnish a wide

range of information about the use of resource sharing networks and other external information sources by library media specialists and the role of library media specialists in decision making and curriculum planning.

Likewise, while the sample used by Miller and Schontz tends to skew the statistics somewhat because poorer schools that are unable to afford a subscription to School Library Journal are left out, their data still represent the most up-to-date picture of school library media centers available at this time. In addition, since the reports have been published biennially since 1983, they provide a valuable picture of school library media center development over the past ten years.

Using the Statistics

How, then, can local youth services librarians best make use of state and national statistics on youth services? As the introduction to this article noted, statistics in general have been used by librarians in a wide range of activities: to support local budget requests and to evaluate local services; to support requests for funding and legislation at the state and national levels; and to compare performance among libraries. The youth services statistics discussed above can be used to support the same set of activities.

Such statistics are useful in support of local budget requests, for example, because budget requests require that a library or a service within a library establish its needs.18 Youth services librarians should know the levels of support being provided in their libraries and should be able to compare their local support with typical levels of support in comparable libraries, both statewide and nationally. As Garland notes, the interest in statistics for youth services "is the result, at least in part, of the lack of funds to adequately support budgets for children's services at a time when demographics show that the preschool and school-age population is increasing." 19

State and national statistics also provide an "external yardstick" against which to measure local performance. This aspect may be especially important as demands for accountability increase and as local funding becomes more difficult to obtain. Local school boards in California, for example, are being required to prepare school accountability "report cards" that include information assessing the schools' media centers.²⁰ Again, youth services librarians need to know the levels of service being provided in their libraries and need to be able to compare their local service with typical levels of service in comparable libraries, both statewide and nationally. As noted above, where shortcomings are detected, needs can be established and budgetary support can be sought.

State and national statistics also serve to support requests for funding at the state and national levels. As Garland again points out, "Factual information about programs and services are needed to guide policymakers at the state and national levels. Without such data, these decision makers can only guess about the condition of library media centers and the support they provide to instructional programs in American schools ... Library media specialists must make policymakers aware of the contributions of library media programs to the schools they support, and they must have supporting data." ²¹

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As with local budget requests, needs must be established in order to support funding requests at the state and national levels.

Finally, the state and national statistics discussed in this article can be used to improve youth services. In many cases, the data presented in the reports discussed above serve as performance targets for local public libraries and school library media centers. The clearest example is *Information Power*, whose guidelines represent the top levels of achievement by programs that provide high levels of service and are "intended to provide assistance in striving for excellence."²²

Conclusions

The efforts to collect youth statistics described above reveal an inconsistent pattern. At the state level, collection efforts for public libraries appear to be better than those of most states, but there is no regular collection of data for school library media centers. At the national level, the only regular effort has been the series of reports by Marilyn Miller and Marilyn Schontz. The last NCES survey of youth services in public libraries was published in 1990, and the last NCES survey of school library media centers was published in 1987. Plans for future surveys by the NCES in both areas are promising, as is the inclusion of specific children's data elements in the FSCS statistics for public libraries, but regular, even annual, nationwide surveys are needed if statistics for this valuable aspect of library service are to be truly useful.

Local youth services librarians should become involved as advocates for such data collection efforts at the state and national levels. Interested librarians should become involved in the appropriate sections of the North Carolina Library Association (the Children's Services Section; the North Carolina Association of School Librarians; and the Public Library Section) and the American Library Association (the American Association of School Librarians, the Association for Library Service to Children, the Public Library Association, and the Young Adult Library Services Association).

On the state level, the collection of youth statistics for public libraries by the State Library appears to be better than efforts in most states, but more could be done to focus on the new output measures for youth services. The State Library could begin by including in its annual report those statistics that can be derived from the data currently being collected (turnover rate, for example) and then begin to

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collect data for those measures that are not collected at present (fill rates, for example). In addition, the State Library should adopt the PLDS standard definition of a child as age fourteen and under.²³ At present, public libraries in North Carolina use no standard definition, and age requirements for juvenile library card registration vary widely (although "age fourteen and under" is the most commonly used range). Without such a standard definition, a number of the output measures cannot be usefully derived.

Much work obviously is needed to encourage the collection of school library media statistics in North Carolina. While the Department of Public Instruction is not alone among state education agencies in its failure to gather statewide data, over half (twenty-five) of the forty-nine state education agencies surveyed by Kathleen Garland did collect statistics in this area. In addition, as Garland points out, local school media specialists tend to collect statistics anyway; 53 percent of school library media center respondents collected circulation data, for example, while only 12 percent of state agencies did so. ²⁴ Consequently, much of the data may exist at the local level, but an effort to collect these statistics statewide is desperately needed.

Local youth services librarians should acquaint themselves with statewide and nationwide efforts to collect statistics in these areas, and they should collect, share, and use local statistics in evaluating and planning their own services. Library schools should familiarize students with the use of statistics in all areas, including youth services. Continuing education providers should also consider training needs in this area. As an example, the youth services agenda adopted recently by Illinois librarians includes the following priority: "Develop workshops for youth services librarians on the importance and effective use of statistics." 25

It is difficult to imagine how any library service can be evaluated, funded, and improved effectively without the adequate collection of statistical information. Given the fact that youth make up nearly 40 percent of all public library users²⁶ and given the recent emphasis on educational reform that should include some focus on the impact of school library media centers on the educational process, it is unfortunate that efforts to collect statewide and nationwide library statistics in the area of youth services have been so sporadic and incomplete.

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¹⁴ Information Power, 114.

¹⁵ Information Power, 115.

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