DOCUMENT RESUME

ED 433 038 IR 057 424

AUTHOR Marston, Christopher C.
TITLE Coverage Evaluation of the Academic Library Survey.
INSTITUTION Bureau of the Census (DOC), Suitland, MD.
SPONS AGENCY National Center for Education Statistics (ED), Washington, DC.
REPORT NO NCES-1999-330
PUB DATE 1999-09-00
NOTE 77p.; Title page and recommended citation use "Academic Library Survey." Cover and text use "Academic Libraries Survey." Official name of survey appears to be "Academic Libraries Survey (ALS)."
AVAILABLE FROM U.S. Department of Education, ED Pubs, P.O. Box 1398, Jessup, MD 20794-1398; Tel: 877-433-7827 (Toll Free); Web site: http://nces.ed.gov/pubsearch/index.asp
PUB TYPE Reports - Evaluative (142) -- Tests/Questionnaires (160)
EDRS PRICE MF01/PC04 Plus Postage.
DESCRIPTORS *Academic Libraries; *Data Collection; Evaluation Criteria; Evaluation Methods; Federal Programs; Higher Education; Interviews; *Library Surveys; National Surveys; Program Evaluation; Program Improvement; Questionnaires; Research Design

ABSTRACT

The Academic Libraries Survey (ALS) was established in 1966 to collect concise information on library resources, services, and expenditures for the entire population of academic libraries in the United States. The ALS is conducted every 2 years as a cooperative venture of the U.S. Department of Education and the Department of Commerce, Bureau of the Census. This report contains the results of an evaluation of coverage issues regarding the ALS. Its objectives are to determine the accuracy of coverage based upon the following five categories: (1) policy, i.e. survey organization, timeliness, and structure; (2) collecting library data, i.e. survey design/data elements; (3) universe of participants coverage; (4) field representation and quality of data collection, i.e. coordinator interviews; and (5) public versus private institution reporting. Suggestions are made to identify potential ways of improving the process of collecting academic library information. Appendices include the 1998 ALS and Consolidated Survey forms, code book for survey interview of library representatives, SAS program for data compilation of the survey interview of library representatives, and a list of unmatched academic library units. (AEF)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ER
ED 433 038

NATIONAL CENTER FOR EDUCATION STATISTICS

Coverage Evaluation of Academic Libraries Survey

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

U.S. Department of Education
Office of Educational Research and Improvement NCES 1999-330

IR057424
BEST COPY AVAILABLE
ERIC
2

Customer Survey of OERI Publication Users

To help us improve future editions of this publication and give you better customer service, we would appreciate your comments on this survey form. Please check the appropriate boxes below for each question. Responses will be kept completely confidential. You may return the survey by mail or FAX. It can be folded and taped closed to allow mailing to the address listed on the reverse side of this form, or it can be returned by FAX to 202–219–1321. **Many thanks for your customer feedback—it is very important to us!**

1. Name of publication

2. How did you receive a copy of this publication?

- ❑ Bought it
- ❑ Borrowed it
- ❑ Mailing list membership
- ❑ Telephone request
- ❑ Internet request
- ❑ Other (please describe) _____

3. Was this publication *easy* to get?

❑ Very ❑ Somewhat ❑ Not at all

4. How did you find out about this and other OERI publications? (Check all that apply.)

- ❑ Conferences
- ❑ Journal articles
- ❑ Teacher/educator
- ❑ Professional associations
- ❑ Internet (WWW)
- ❑ Publication announcement
- ❑ Received in mail
- ❑ OERI staff contact

5. For what purposes did you use this OERI publication? (Check all that apply.)

- ❑ Planning
- ❑ Policy or legislation
- ❑ Administrative decisions
- ❑ Teaching, class material
- ❑ Research/analysis
- ❑ General information
- ❑ Writing news articles, TV or radio material
- ❑ Marketing, sales, or promotion
- ❑ Other (please describe) _____

6. Did the publication help you accomplish whatever you needed it for?

❑ Yes ❑ No ❑ Partially

7. What is your occupation?

❑ Parent ❑ Teacher ❑ Administrator
❑ Librarian ❑ Researcher ❑ Statistician
❑ Journalist/writer ❑ Policy Analyst ❑ Student
❑ Program Planner
❑ Other (please specify) _____

8. How could this OERI publication (or other OERI publications) better meet *your needs*? (Check all that apply).

- ❑ More important topics in education
- ❑ More timely release of data
- ❑ More text introductions to each section
- ❑ More research statistics
- ❑ Shorter reports (less than 10 pages)
- ❑ Other (please describe) _____

9. Overall, how satisfied are you with the following aspects of this publication?

	Very Satisfied	Satisfied	Dissatisfied
a. Comprehensiveness of information	❑	❑	❑
b. Clarity of writing (readability, interpretability)	❑	❑	❑
c. Clarity of presentation (e.g., tables, charts)	❑	❑	❑
d. Timeliness of information	❑	❑	❑
e. Accuracy of information	❑	❑	❑
f. Clarity of technical notes	❑	❑	❑
g. Usefulness of resources and bibliography	❑	❑	❑
h. Organization	❑	❑	❑
i. Length	❑	❑	❑
j. Format	❑	❑	❑

PAPERWORK BURDEN STATEMENT
Office of Educational Research and Improvement (OERI)
Publication Customer Survey

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 1880–0529. The time required to complete this information collection is estimated to average 10 minutes per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collection. If you have any comments concerning the accuracy of the time estimate(s), suggestions for improving this form, or concerns regarding the status of your individual submission of this form, write directly to: Information, Room 204, Media and Information Services, OERI, U.S. Department of Education, 555 New Jersey Avenue NW, Washington, DC 20208–5570.

BEST COPY AVAILABLE

OERI Publication Customer Survey

Media and Information Services
555 New Jersey Avenue NW—Rm. 202
Washington DC 20208–5570

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, $300

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL

FIRST-CLASS MAIL PERMIT NO. 012935 WASHINGTON DC

POSTAGE WILL BE PAID BY US DEPARTMENT OF EDUCATION

A. Reed
Room 202
Media and Information Services
Office of Educational Research and Improvement
US Department of Education
555 New Jersey Avenue NW
Washington DC 20208–5570

Fold on line—TAPE CLOSED—DO NOT STAPLE

10. Do you have any suggestions regarding the content or format of future editions of this publication or other comments?

4

ERIC

NATIONAL CENTER FOR EDUCATION STATISTICS

Technical Report September 1999

Coverage Evaluation of the Academic Library Survey

Christopher C. Marston
Bureau of the Census

Jeff W. Williams, Project Director
National Center for Education Statistics

U.S. Department of Education
Office of Educational Research and Improvement NCES 1999–330

U.S. Department of Education
Richard W. Riley
Secretary

Office of Educational Research and Improvement
C. Kent McGuire
Assistant Secretary

National Center for Education Statistics
Gary W. Phillips
Acting Commissioner

The National Center for Education Statistics (NCES) is the primary federal entity for collecting, analyzing, and reporting data related to education in the United States and other nations. It fulfills a congressional mandate to collect, collate, analyze, and report full and complete statistics on the condition of education in the United States; conduct and publish reports and specialized analyses of the meaning and significance of such statistics; assist state and local education agencies in improving their statistical systems; and review and report on education activities in foreign countries.

NCES activities are designed to address high priority education data needs; provide consistent, reliable, complete, and accurate indicators of education status and trends; and report timely, useful, and high quality data to the U.S. Department of Education, the Congress, the states, other education policymakers, practitioners, data users, and the general public.

We strive to make our products available in a variety of formats and in language that is appropriate to a variety of audiences. You, as our customer, are the best judge of our success in communicating information effectively. If you have any comments or suggestions about this or any other NCES product or report, we would like to hear from you. Please direct your comments to:

National Center for Education Statistics
Office of Educational Research and Improvement
U.S. Department of Education
555 New Jersey Avenue NW
Washington, DC 20208–5574

September 1999

The NCES World Wide Web Home Page is
http://nces.ed.gov/pubsearch/index.asp

Suggested Citation

U.S. Department of Education. National Center for Education Statistics. *Coverage Evaluation of the Academic Library Survey*, NCES 1999–330, by Christopher C. Marston. Project Officer: Jeff W. Williams. Washington, DC: 1999.

For ordering information on this report, write:

U.S. Department of Education
ED Pubs
P.O. Box 1398
Jessup, MD 20794–1398

or call toll free 1–877–4ED–Pubs.

Content Contact:
Jeff W. Williams
(202) 219–1362

Foreword

This report was prepared for the National Center for Education Statistics (NCES) by the Governments Division of the U.S. Census Bureau. It is intended to address issues of interest and concern to the NCES and education policymakers and researchers. The report contains the results of an evaluation of coverage issues regarding the Academic Libraries Survey (ALS). Its objectives are to determine the accuracy of coverage based upon policy, organization, survey design, universe of participation, survey coordinator perceptions, and public versus private institution reporting. Suggestions are made to identify potential ways of improving the process of collecting academic libraries information.

Abbreviations

The following abbreviations are used frequently in this report:

ABA—American Bar Association

ACA/SAA—Academy of Certified Archivists/Society of American Archivists

ACRL—Association of College and Research Libraries

ARL—Association of Research Libraries

ALA—American Libraries Association

ALD—American Libraries Directory

ALS or IPEDS-L—Academic Libraries Survey

CCD—Common Core of Data

GPO—Government Printing Office

IPEDS—Integrated Postsecondary Education Data System

IPEDS-CN—Consolidated Survey

LSDAS/LSAT—Law School Data Assembly Service/Law School Admissions Test

NCES—National Center for Education Statistics

NCLIS—National Commission of Library and Information Science

NII—National Information Infrastructure

NPR—National Performance Review

O—Oberlin Group

OIR—Office of Information and Regulatory Affairs

OMB—Office of Management and Budget

TABLE OF CONTENTS

FOREWORD v

ABBREVIATIONS vi

INTRODUCTION 1

SUMMARY OF FINDINGS AND RECOMMENDATIONS 3

CHAPTER 1. SURVEY ORGANIZATION, TIMELINESS, AND STRUCTURE 5

Section 1.0 Survey Organization 5
Section 1.1 Organization Structure and Timeliness 6

CHAPTER 2. COLLECTING LIBRARY DATA 9

Section 2.0 Defining the Academic Library 9
Section 2.1 IPEDS-L Academic Libraries Survey and IPEDS-CN Consolidated Survey 9
Section 2.2 Federal Regulations on Writing Applied to Survey Questionnaire Construction 11
National Performance Review (NPR) 11
Findings 12
Suggestions 12
Section 2.3 Questionnaire and Information Coverage 12
Method of Comparison 12
Findings 13
Recommendation 15

CHAPTER 3. UNIVERSE COVERAGE 17

Section 3.0 Universe Listings and Methodology 17
Section 3.1 Universe Comparisons 17
Branches – American Library Directory Volume 1 (1997–1998) 17
Library Science Programs – American Library Directory Volume 2 (1997–1998) 18
Associations – ARL and Oberlin 18
Web List – University of Florida 18
Archives Special Collections and Academy of Certified Archivists 19
Federal Depositories 19
Repositories and Special Collections 20
Professional 20
General 21
Summary of Findings and Recommendations 21

CHAPTER 4. FIELD REPRESENTATION AND QUALITY OF DATA COLLECTION 23

Section 4.0 Methodology 23
Section 4.1 Survey Interview Questionnaire 23
Section 4.2 Participants 23
Section 4.3 Survey Format 23
Section 4.4 Data Reporting and Institution Coverage 25
Non accredited Institution Reporting 25
Electronic Reporting 25
Section 4.5 Recommendations 25

CHAPTER 5. PUBLIC VERSUS PRIVATE REPORTING 27

Section 5.0 Methodology 27
Applying a Secondary Sample 27
Comparing the Data 28
Section 5.1 Findings 28
Public Institutions 28
Private Institutions 28
Private Versus Public Reporting 29
Suggestions 29

APPENDIX A. IPEDS-L Questionnaire 1998, IPEDS-CN Questionnaire 1998 31

APPENDIX B. Code Book for the Survey Interview of Library Representatives 59

APPENDIX C. SAS Program for Data Compilation of the Survey Interview of Library Representatives 61

APPENDIX D. Universe Coverage: A List of Unmatched Units 63

"What is more important in a library than anything else...than everything else...is the fact that it exists."

Archibald MacLeash
(Librarian of Congress 1939–1944)

INTRODUCTION

Historic Overview of Information and Education

Since World War II, the United States has played a hegemonic role in global information diffusion and mass communication technology innovation.[1] In fact, much of this role has emanated from the inherent value we place on education attainment and the need to transfer knowledge within public and private spheres. According to the National Center for Education Statistics (NCES)/U.S. Department of Education, between the years 1997 and 2000 approximately 14 to 15 million people will be enrolled in our colleges and universities (in a given year). Eleven million of those students will attend public institutions; while three million of them are expected to select private college and university education.[2] Given these statistics, and regardless of institution selection, higher education does benefit from a large amount of public funding in the United States. Public policymakers who allocate this money have the important task of making sure that money is spent wisely.

We know that knowledge/information is transferred in traditional higher education structures through three primary modes: (1) classroom instruction, (2) private one-on-one instruction, and (3) independent research. Some would argue that virtual and video technology could be represented as a fourth mode of information transfer (distance and correspondence learning). Regardless of which mode of information diffusion takes place in higher education structures, the academic library represents a common tool shared by all four modes. Based upon their inherent value within the learning process, it is prudent for institutions associated with higher education to continuously assess the efficient and effective mobilization of resources dedicated to the internal functions of the academic library.

A large portion of the change in information diffusion via academic library systems may be attributed to the advancement of new media and digital technologies—the means by which information is transferred or archived. As these technologies advance, a constant flux of new information (ebb and flow) is produced. This phenomenon makes the task of higher education institutions and the academic library more and more complicated every day.[3]

New media technology is breaking down the barriers that once existed between the physical control academic institutions had over their private collections and holdings and the general public sphere. Libraries are now assembling on-line resources—virtual library collections maintained by cybrarians (virtual librarians)—accessible by anyone who can operate a personal computer and is able to utilize the world wide web. Blurring the existence even further, many academic libraries have become "official" repositories for a wide variety of public information. Federal depositories are a perfect example of this trend. Given the diversification of holdings and their applicability to various enclaves within the general public, targeting academic library clientele is not an easy task either. One way we can understand the end user of the academic library is to focus upon the operating function of the library itself.

Traditionally speaking, the academic library has served a combination of the following people: students, faculty, and institutional staff. However, given the emergence of public information domain, we are finding that the service base of the academic library is broadening to include a wider audience. Shared library (reciprocal) agreements such as interlibrary loans and consortia are among the range of issues broadening the functional accessibility of resources available to the general public as well as the academic sphere. As we experience these changes, evaluation research regarding information services will become more and more important to university planning administrators.

---

[1] *Herbert Schiller, Information Inequality (NY: Routledge Press).*

[2] *Gerald, Debra with William Hussar, Projections of Education Statistics to 2008 (National Center of Education Statistics NCES 98-016 / U.S. Department of Education).*

[3] *These initiatives associated with the National Information Infrastructure (NII) have a strong bearing on education and information diffusion within the public sphere. Evidence of this can be seen in the effects information technology has had on academic libraries throughout the country. (See http://www.iitf.nist.gov/documents/docs/admin_wp_commact.html)*

Value can accrue to the academic institution that maintains and upgrades its academic library facilities. The American University Strategic Plan 1996 - Constructing the Global University (Washington, D.C.) is illustrative of this phenomenon. In that document, it is apparent that information technology is changing the structure of the modern university—and upgrading existing library facilities is an imperative function within the overall strategic plan proposed for university expansion within the next couple of decades. Issues such as availability and access to information, national information policies, information networks through technology, structure and governance, services through diverse needs, and training to reach the end users becomes quite complicated for academic institutions large and small. In fact, all these topics were among a variety of issues addressed at the 1996 White House Conference on Library and Information Services.[4] Cognizant of this reality, the U.S. Department of Education/National Center for Education Statistics (NCES) continues to collect and identify pertinent data associated with all national academic libraries, and to use such data in the promotion of strategic policy and budgetary planning at the regional and national levels.

Objectives Covered in this Evaluation

This paper utilizes five distinctive categories to evaluate Academic Libraries Survey (ALS) coverage:

1. Policy
2. Survey Design/Data Elements
3. Universe of Participants
4. Coordinator Interviews
5. Public versus Private Institution Reporting

Policy is examined in terms of NPR guidelines for "Best Practices" in government research and the importance of this survey in the complex environment associated with our National Information Infrastructure. Second, survey design is assessed to evaluate what kind of data are covered by the ALS and how they measure up to professional standards set by the American Libraries Association (ALA) and other notable academic library research groups. Third, universe participation is evaluated by comparing universe units to other lists applicable to academic library research. Sources for comparison were selected based upon the professional respect that they command in the library field. Fourth, NCES expressed an interest in the opinion of survey coordinators regarding instrument design and data covered by ALS. Finally, taking coverage a step further, private versus public institution reporting was examined.

---

[4] *NCLIS - National Commission on Library and Information Science - Mary Alice Hedge (March 1994–December 1996). (See http://www.nclis.gov/libraries/96rec1.html).*

SUMMARY OF FINDINGS AND RECOMMENDATIONS

This evaluation addresses the quality of coverage based upon policy, organization, survey design, and participation. Findings suggest that the data collected represent a high quality product when compared to other surveys within the same field of study. Instrument revisions are consistent with national performance objectives established by OMB and the National Performance Review. As a result, IPEDS is creating a more efficient and affective instrument for data collection. By incorporating a reader-focused environment, erroneous reporting should be decreased, and editing (data cleaning) time should theoretically be reduced as well. Therefore, coverage quality should be increased or maintained based upon policy and survey design initiatives currently in place.

Due to the size of ALS universe, data gathering is extremely tedious and complex. Regardless of the presence or absence of federal funding, institution response is initiated within a self paced environment. Electronic software and web technologies are helping to reduce the time it takes for the institution to respond to ALS. As a mutual support mechanism to alleviate the timeliness issue, an early release policy for the data is envisioned. It is possible, that by reducing the time necessary for data collection, data dissemination could occur at an earlier date as well. If achieved, efficient reporting could directly effect the timeliness issue associated with data dissemination as well. Institutions who have the option of participating in the ALS might elect to do so in light of these changes.

Field coordinators are an excellent resource to assess the quality of institution coverage and instrument design. This evaluation proposes that a short questionnaire be included in the IDEALS electronic reporting software to assess this valuable resource for longitudinal and cross sectional evaluation of the ALS. By utilizing their first hand experience, library representatives could help NCES/IPEDS maintain or increase the quality of data coverage and collection at the regional level.

The quality of institutional coverage remains excellent when compared to other institutional listings directly related to the academic libraries industry. Seven reputable listing types were compared. Findings suggest that ALS universe is superior (coverage gap of only one to three percent). Regardless of this finding, future studies are needed to assess whether or not the data collected by ALS fully account for branch data associated with parent institution resources. The only resource that could come close to assessing this quality would be branch data compiled from the American Libraries Directory.

A problem currently plaguing ALS data is the presence or absence of professional school statistics in parent college or university data. Branch comparison could be valuable in light of this problem as well. In an effort to clarify parent institution reporting, the instrument could include questions indicating whether or not professional school resources are present or absent in aggregate institution statistics, a method already utilized by ACRL and ARL (professional academic library research associations).

Regardless of the problems with ALS outlined in this evaluation, it is the most comprehensive data source for academic libraries data of its kind in the United States. No other public or private association provides a more complete listing of resources offered by public and private colleges and universities. Because ALS data is functional in terms of policy assessment and resource allocation (funding), accurate statistics will provide for a more conscious approach to academic libraries in the United States. Survey refinement and timely dissemination of ALS data will not only provide current statistics for the policy makers, but also provide a means for institutions to assess their own resources at the national, regional, and sector levels.

Finally, based upon the findings from the segment observation in this study (public versus private reporting), the most problematic institutional type associated with reporting would include the nonprofit/private/higher education four year institutions (primarily of a religious affiliation). It is anticipated that the problem of nonresponse by Title IV institutions would be reduced if mechanisms to reinforce participation are put into place nationally. The question remains: Where does ALS proceed from here?

Based upon field representative response, ALS should continue to change along with the industry. Data coverage is a key factor in the assessment of institutional, regional, and national academic library resources. Without measuring current trends in resource procurement and their management,

appropriations cannot be made to enhance resources and facilities that already exist.

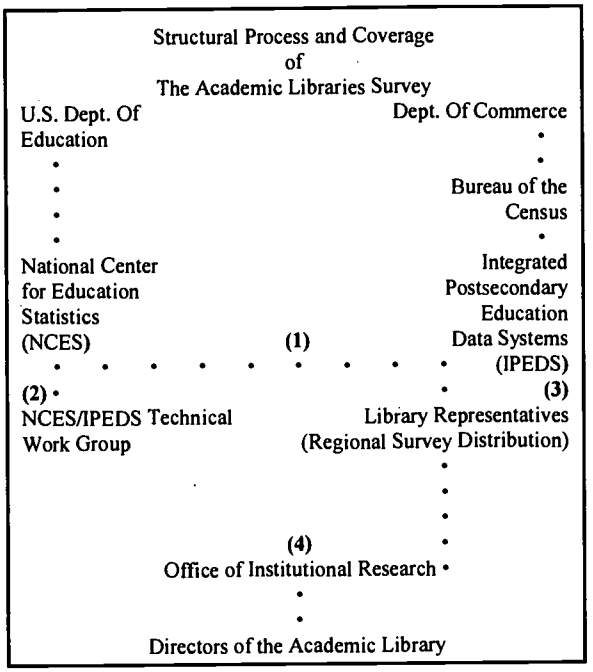
Should resource statistics that do not pertain to "higher education institutions" in NCES/IPEDS data coverage be removed from ALS reporting, specifically referring to IPEDS Sectors 7, 8, and 9 (for IPEDS description of sector classification, refer to footnote #12 of this evaluation)? It is already known that by definition these institutions fall outside the defined ALS universe (1998) of participants. Given trends in nontraditional education, for public officials to adequately assess library resources covered in a community or region, it might be necessary to include nontraditional library elements within the comprehensive sphere of resources available to areas and communities. Paralleling this argument, ALS field representatives indicated in the national survey interview conducted as a part of this evaluation that vocational and nonacademic library resources do represent significant library resources in the United States.[5] Coverage of data and institutions and their resources is relative to region. Whether public or private, if this perception is conducive to the primary goals outlined by the U.S. Department of Education, then ALS should attempt to achieve these expectations.

[5] *Although representatives felt that nontraditional library data coverage is important, descriptive statistics should be reported separately so as not to skew the data for postsecondary education institutions.*

CHAPTER 1. SURVEY ORGANIZATION, TIMELINESS, AND STRUCTURE

Section 1.0 Survey Organization

The Academic Libraries Survey (ALS) was established in 1966. Until 1988, it was administered in three-year cycles. After that time, the survey was conducted every two years. It has not deviated from its original purpose: to collect concise information on library resources, services, and expenditures for the entire population of academic libraries in the United States. These objectives parallel the overall goal of the U.S. Department of Education: to collect and identify pertinent data associated with all national education resources, and to use the data in the promotion of strategic policy and budgetary planning at the regional and national levels.



Referring to the table above on *Structural Process and Coverage*, we observe the method for distributing the ALS. It is a cooperative venture initiated by the U.S. Department of Education, in conjunction with the Department of Commerce, Bureau of the Census. Responsible for the collection and dissemination of the data are NCES staff and Integrated Postsecondary Education Data System (IPEDS) staff at Census (see Item 1). A technical work group is utilized to evaluate all aspects of survey content and data coverage (see Item 2). This group is made up of experts in the library and information services who volunteer their time and expertise to make the ALS one of the best national data resources of its kind.[6] Specifically, the function of this advisory committee is to benchmark the quality of the data being collected and to make variable/content suggestions based upon innovation and new features emerging within the library process (i.e., integration of new technology). Please refer to Appendix A for a copy of the most recent ALS questionnaires. After this committee has proposed suggestions and the IPEDS survey staff have reviewed and constructed a draft of the questionnaire, the product is then submitted to both NCES and IPEDS ALS directors for final approval.

Upon approval, survey questionnaires are printed and prepared for distribution.[7] At this point, ALS questionnaires are delivered by IPEDS to regional library representatives—Item (3). The library representatives then distribute them to the institutions designated in the NCES/IPEDS survey universe of academic libraries. In a few cases where a regional coordinator is absent in the process, the survey forms may be distributed directly from the IPEDS clearing house located in Jeffersonville (IN) to the individual institution. It is highly likely that institutions receiving ALS will process the survey first through their offices of institution research — Item (4). These offices are the primary source of information about a wide variety of institutional characteristics; and they serve to funnel college and statistical information inquiries through the necessary channels needed to provide that information. In this process, ALS will most likely be delivered to the director of the main library facility. At that point, he or she will select the staff who will fill out ALS. Upon completion, ALS is returned back through its distribution path. After collecting the forms for an area, library representatives have the option of either

---

[6] *1998 Technical Work Group—Mary Jo Lynch, Julia Blixrud, Paul DuMont, Peter Deekle, Jean Major, Carolyn Norman, Ron Naylor, and Keith Lance.*

[7] *A copy of the survey questionnaire can be found in Appendix A of this evaluation.*

reporting the data electronically (IDEALS),[8] or submitting the actual library survey forms back to Census in Jeffersonville. IPEDS staff at Census assemble and clean (edit) the data set, make imputations where necessary in the data, and transfer the set to NCES. NCES uses the data to publish its descriptive reports, *The Status of Academic Libraries in the United States* and *E.D. Tabs.*

Section 1.1 Organization Structure and Timeliness

Coordinating a national survey such as ALS is not an easy undertaking. NCES/Census administrators continuously seek to make ALS the most sophisticated tool to study academic library resources. To do so, ALS must remain sensitive to the flow of academic library information; and how existing organization structures at both national and local institutional levels collect and process ALS data. It is known that data collection is directly related to timeliness and data dissemination. The quicker the agencies can collect data, the quicker those data can be processed and made available to the general public.

NCES/IPEDS has two technologically sophisticated options (types) to collect ALS data:

1. IDEALS downloadable software – NCES/IPEDS can deliver ALS to library representatives via electronic format, by using IDEALS. At that point, surveys can be distributed to the individual institutions (current method of distribution).

2. Web based questionnaire – Institutions could access and report directly to NCES/ IPEDS. (Not available at this time)

Type 1 utilizes coordinators or library representatives to manage survey distribution and institution data collection. Type 2 eliminates the need for coordinators altogether, allowing institutions to access and return ALS data directly to NCES/IPEDS by themselves. Both types are sufficient ways to collect ALS data.

Type 1 allows regional representatives the privilege of examining the data for their region prior to submitting it to NCES/IPEDS. Timely release of the data has been problematic in recent survey cycles by as much as two survey cycles. By utilizing Type 1, state agencies and other entities interested in utilizing ALS data in policy planning can obtain the data prior to its submission to NCES/IPEDS for processing and editing.[9] In doing so, they are not spending more money collecting data which have already been commissioned to be collected by the federal government, NCES/IPEDS. In turn, this best practice parallels National Performance Review (NPR) standards currently being stressed by Office of Management and Budget (OMB), as well as the President of the United States. The problem with type 1 is that it does not take into consideration individual institution use of the data. Regardless of coordinator privileges, type 1 does not facilitate data dissemination within a timely manner. A lag time still exists between collection, processing/editing, and dissemination of ALS data. In order to retain value of ALS data, timely access is required. More specifically, there are those institutions that are not required by law to participate in ALS, such as non OPE federally funded postsecondary schools. The only incentive for these schools to participate in ALS would be their ability to access and utilize the data collected by ALS. The question remains: If a layer of bureaucracy could be removed from the data collection process (i.e., utilizing a web based questionnaire for ALS represented in data collection type 2), could the problem of timeliness and data dissemination be reduced or eliminated?

In the case of ALS distribution, it is still likely that the problem of timeliness would not be eliminated altogether by using type 2 over data collection type 1. Even if data collection time were reduced, it cannot be guaranteed that processing and editing would not continue to make the process of data dissemination lengthy. Final imputation, editing, and review can only take place after the last state or regional respondent has reported. Until type 2 distribution is implemented in the ALS distribution process, and the two types of distribution compared/evaluated, we cannot know which method is the most efficient and effective means

[8] *IDEALS is a software package, downloadable from the web, which allows coordinators to enter the data into the software and run edits. This software enables the reporting agent to resolve errors before submitting the data to the Bureau of the Census. Edits can include: sum checks, value range, consistency, and current versus prior cycle. Data can be submitted electronically, via electronic mail, (FTP) file transfer protocol, or by submitting a diskette.*

[9] *If they serve as ALS library representative coordinators.*

to process ALS. The question remains: What can be done to alleviate some of the problems encountered in ALS processing currently in place?

One important option available to NCES/IPEDS is modifying the way in which ALS data are disseminated. Unlike ALS, Common Core of Data (CCD) offers an "early release policy" for its data. While some preliminary statistics are offered at the NCES web site for ALS, data for institutional groupings in the CCD are made available as each grouping of data is collected/completed. Completed groupings are appended to the early release file, and are stipulated as a preliminary release to the Common Core of Data. In some cases, that information is not altogether complete. It has not been processed through final edits and imputation. This is why limitations are specified within early CCD release. By making the limitations of early release data known, NCES has the opportunity of offering the data as they become available rather than holding up the process of distribution. At this time, NCES has taken steps to institute an "early release policy" for ALS data. Evidence of this effort can be seen at their world wide web site.[10]

Regardless of the type of survey processing used, it is possible for satisfaction levels held by ALS data users to increase upon NCES adoption of early release practices for ALS data dissemination. A quality assurance survey of data users is recommended here to assess the presence of a new "early release" policy.

NCES/IPEDS is not the only collector of academic library data. Association of Research Libraries, Association of College and Research Libraries (ACRL), and the Oberlin Group are among the top academic library research groups in the country, along with IPEDS. Their work is recognized by the American Libraries Association (ALA) as representing impressive networks from which to conduct academic libraries research. It is important to point out that these organizations are dedicated to the collection of quality academic library data.[11]

Web utility is not totally removed from the option of electronic software. Because most modern academic libraries possess web capability, downloadable ".exe" files containing this software can be accessed from IPEDS web site by the ALS participant. IPEDS survey managers continuously assess all electronic reporting options for ALS. Further decisions to tailor these options for ALS will be based upon field research experienced in other NCES/IPEDS surveys.

[10] *http://nces.ed.gov/surveys/academicdata.html*

[11] *In recent survey years, ALS has been modified to reflect the changing roles of library resources and services with the help of these associations through the ALS technical work group. Given the range of technical expertise represented here, and a history of libraries research (i.e., Public Libraries Survey, School Library Media Centers Survey, State Library Agencies Survey, Federal Libraries and Information Centers Survey, and the Library Cooperatives Survey), NCES/ IPEDS remains the best candidate to collect and assemble academic libraries data for the United States. Not only do they cover essential data applicable to academic libraries, but they are dedicated to the utilization of the most modern technologies associated with data collection possible. This is demonstrated in the NCES/IPEDS collective effort to integrate only the best data collection methods possible.*

CHAPTER 2. COLLECTING LIBRARY DATA

Section 2.0 Defining the Academic Library

Classification of qualified versus nonqualified institutions participating in ALS was clarified in the 1998 instrument (see Appendix A).[12] A new section was added at the beginning of the survey questionnaire which could filter out institutions not meeting the necessary criteria set for participation in the ALS. The section added is a checklist covering a series of four basic criteria associated with the IPEDS definition of what an academic library is:[13]

Academic library . . .

> *Contains an organized collection of printed or other materials, or a combination thereof;*
>
> *Offers a staff trained to provide and interpret such materials as required to meet the informational, cultural, recreational, or educational needs of the clientele;*
>
> *Provides an established schedule in which services of the staff are available to the clientele;*
>
> *Offers the physical facilities necessary to support such a collection, staff, and schedule.*

In addition to the definition outlining the four primary functions of the academic libraries, the NCES/IPEDS Glossary (1995) offers another description outlining basic characteristics of the library.

A library is . . .

> *An organized collection of printed, microform, and audiovisual materials which is administered as one or more units;*
>
> *Is located in one or more designated locations;*
>
> *Makes printed, microform, and audiovisual materials as well as services of the staff accessible to students and faculty.*

Both definitions include a description of organized collections and their accessibility to clientele. However, the second description does offer the possibility that a library can be housed at both principal and branch facilities. It is important to note that the IPEDS criteria check list is directly related to its universe description. Even though the general definition covers the presence or absence of branch facilities, these characteristics are not necessarily all the key factors needed when determining whether or not an institution qualifies for ALS participation. However, they do outline to a greater degree the data covered by ALS.

Section 2.1 IPEDS-L Academic Libraries Survey and IPEDS-CN Consolidated Survey

There are two primary sources of academic library data collected by NCES/IPEDS: (1) ALS/IPEDS Form-L and (2) the Consolidated Survey IPEDS Form-CN. Of the two, IPEDS-L provides the more comprehensive data on academic libraries. Two criteria can be used to distinguish universe coverage between the surveys: Title IV funding and degree granting status.[14] Since the

[12]

IPEDS Sector Classification for Postsecondary Education Institutions
1. 4 year Public
2. 4 year Private Nonprofit
3. 4 year Private for Profit
4. 2 year Public
5. 2 year Private Nonprofit
6. 2 year Private for Profit
7. Less than 2 year Public
8. Less than 2 year Private Nonprofit
9. Less than 2 year Private for Profit

[13] *Thelma Hall, former IPEDS survey director for ALS, proposed this format change in the 1998 draft. The current director is Pat Garner.*

[14] *Title IV Institutions...are eligible to participate in Title IV federal student financial aid programs, such as Pell Grants, Stafford Loans, and the College Work Study Program.*

1996 survey, NCES/IPEDS has reorganized coverage and generated changes within the type of data collected from reporting institutions based on those two criteria. The greatest changes in coverage can be seen in the type of data collected from postsecondary vocational and training institutions.

The Academic Libraries Survey: Form IPEDS-L

In 1996, the ALS was distributed to only those institutions granting degrees and receiving Federal Title IV funding. These criteria included a population of approximately 4,000 institutions, a subset of the NCES/IPEDS universe. Changes in the proposed 1998 distribution would add approximately 500 more institutions to the population currently covered by the most recent (1996) ALS. Of these 500 institutions added, the majority are expected to consist of NCES/IPEDS Sector 2 (higher education) institutions.

The Consolidated Survey: Form IPEDS-CN

When compared to its more limited counterpart (the Consolidated Survey), the Academic Libraries Survey distribution increase is minimal. In 1996, approximately 2,800 institutions received the consolidated form. By 1998, that figure will increase to almost 6,000.[15] For the consolidated survey, a substantial increase of library data collection will primarily be related to NCES/IPEDS Sector Categories 7, 8, and 9 vocational and trade institutions (see footnote #12 of this evaluation for IPEDS sector descriptions).

Changes in NCES/IPEDS Academic Libraries and Consolidated Survey Distribution

Institution Characteristics		Survey Distribution	
TitleIV (OPE)	Degree Granting	1996	1998
X	X	L	L
X		CN	CN
	X		L
			CN

X - Presence of a characteristic at an institution

L - Academic Libraries Survey distributed to an institution

CN - Consolidated Survey distributed to an institution

Note: There is an overlap of institutions from 1996 to 1998 plan. Those in 1996 who had a FICE Code (N=34 schools - N=27 Sector 9, N=4 Sector 8, and N=3 Sector 7 accredited higher education institutions, or were classified as such by regional coordinators, or contained courses at a lower level that could be applied at other institutions within higher education programs) were included in the 1996 ALS universe.

[15] *Adding 2,800 Title IV institutions to 3,098 institutions who are neither degree granting nor qualify/offer Title IV funding.*

BEST COPY AVAILABLE

Based upon the general research goal embraced by the U.S. Department of Education, it is important to identify as many of the nation's education resources as possible to promote informed policy planning within the national education infrastructure. The move to include vocational and trade institutions in the 1998 coverage of academic libraries does reflect the spirit of that goal. Participation of private institutions meeting these characteristics is strictly on a voluntary basis.[16] There is concern that response rates may decrease as a result of changes in the ALS/IPEDS universe. To adequately evaluate the quality of coverage based upon the proposed universe changes, it would be prudent to identify motivating factors of participation within the universe of ALS respondents.

In both IPEDS-L and CN surveys, nonparticipation in the ALS cannot always be attributed to ineligibility for federal funding. It should not be assumed that the institutions that do not receive federal funding solely equates to ineligibility for Title IV benefits. While some institutions do not qualify for the funding, others might exhibit eligibility without exercising their option. In any case, only those institutions receiving benefits are compelled by law to participate in ALS.[17]

Participation does not always ensure the highest quality of response reported in ALS. Data submitted on the ALS remains at the discretion of the responding institutions. Not all of the data sought by ALS is reported correctly by its respondents. In some situations, IPEDS must break down or generate reliable statistics based upon the history of reports submitted in previous survey cycle(s). This process is referred to as imputation. If imputations cannot be calculated for a given institution, then data are reported missing within the survey cycle. The more units of the ALS population we miss in coverage, the further away we are going to be in our observation of aggregate/average national and regional academic library resources.

Based upon these dimensions associated with data reporting, we can assume that quality of coverage is directly related to the extent of the data supplied. It is possible to speculate that the proposed 1998 universe expansion could decrease response rates currently generated in the IPEDS-L and CN surveys.[18] Although we risk a decrease in response rate, NCES/IPEDS universe expansion involves many institutions currently not included in other studies of this nature. Inclusion of the data could enhance the overall coverage used by policy makers and institutions alike to assess academic library resources at the regional and national levels. Given this unique quality of the data, its value could offset lower possible response rates for both IPEDS-L and CN surveys. Speculation relating to value of coverage will depend on outcomes experienced in the 1998 survey cycle and the amount of data obtained from these additional institutions.

Section 2.2 Federal Regulations on Writing Applied to Survey Questionnaire Construction

National Performance Review (NPR)

The National Center for Education Statistics (NCES) has implemented questionnaire construction strategies for years to make their surveys "reader focused" without losing details in data collection. While this may not be a new practice for NCES, it is a strategy being implemented more and more among federal agencies. In 1996, the Office of Information and Regulatory Affairs (OIR) at the OMB initiated meetings among several federal agencies to promote the use of "plain language" in the conduct of federal official business. This initiative was begun under the auspices of the administration's NPR, which is dedicated to streamlining the way government conduct its affairs. Under Executive Order 12866, a regulatory work group was established to carry out NPR's objectives.[19]

The issue of clarity and plain language movement has created heated debate in the past few years.[20] Opponents (many associated with the legal profession)

---

[16] *Sectors 5 and 6 institutions not receiving Title IV funding (federal).*

[17] *Higher Education Act 1965, Title IV (20 USC 1090(a)(17)).*

[18] *Active response rate for 1996 IPEDS-L is 94 percent versus 93 percent for IPEDS-CN based upon an IPEDS report dated 06/20/97. Active response rate is calculated by taking the number of active units that responded to the survey and dividing by the total number of surveys mailed minus those which are out of scope.*

[19] *Vice President Al Gore, Common Sense Government: Works Better and Costs Less (NPR, 1995).*

[20] *Joseph Kimble, The Scribes Journal (West Publishing Company, Volume 5, 1994–1995).*

have suggested that the use of plain language debases precision when addressing complex issues. However, NPR asserts that this is not the case. The use of plain language improves reading comprehension, making facts clearer and to the point, and reduces waste of our country's human and raw material resources. In keeping with this perspective, survey instrument construction requires specific wording and precise content to elicit true patterns from a given survey population. Survey methodologist Earl Babbie pointed out that survey questionnaire design can have a direct impact upon the quality of the information collected in a study. If a question cannot be clearly understood, then a respondent might answer the question incorrectly or choose not to participate in a survey altogether, an example of survey mortality.

Findings

National Performance Regulations are satisfied. Modifications in ALS comply with the spirit of Executive Order 12866, clearly supporting the guidelines stipulating regulatory reform by upgrading format to represent a more reader focused survey orientation.

The quality of coverage should be maintained or increased given the efforts made by NCES/IPEDS to make the survey questionnaire more understandable.

Suggestions

Because plain language is an important element in survey questionnaire development, NCES/IPEDS survey planners for ALS are urged to participate in the Plain English Network (PEN). PEN is supported by NPR, and is the cornerstone to converting complicated, bureaucratic verbiage into plain English.[21]

Section 2.3 Questionnaire and Information Coverage

Method of Comparison

In this section, three primary sources of academic library data are identified and compared to IPEDS-L Academic Libraries and IPEDS-CN Consolidated Surveys. They are as follows:

1. Association of College and Research Libraries
2. Association of Research Libraries
3. The Oberlin Group

Nine variables were identified by which to compare data coverage among five primary sources of academic libraries information:

1. General library information and point of contact
2. Library staff
3. Library operating expenditures
4. Library collections
5. Library services
6. Branch libraries counted
7. Professional schools/libraries
8. Library usage
9. Electronic resources

The purpose of this comparison is to assess whether or not the NCES/IPEDS instrument adequately covers data based upon the nine categories identified. The following table summarizes a qualitative data coverage comparison between the most recently used survey questionnaires for NCES/IPEDS and the above-mentioned organization/associations.

[21] *NPR's "Common Sense Regulations" can be accessed at (http://www.plainlanguage.gov). The Plain English Hotline is (202) 632-0306, ext. 169 for PEN members and other interested persons.*

IPEDS (L) Data Coverage Compared to IPEDS (CN), ACRL, ARL, and Oberlin									
	1	2	3	4	5	6	7	8	9
L	Y	Y	Y	Y	Y	Y	Y	Y	Y
CN	N	Y	Y	Y	Y	N	N	N	N
AC	Y	Y	Y	Y	Y	Y	Y	Y	N
AR	Y	Y	Y	Y	Y	Y	Y	Y	N *
O	Y	Y	Y	Y	Y	N	N	N	Y

Cells Contain

Y - Covered in the data collected (Y=Yes)
N - Category Function Not Covered (N=No)
* - ARL conducted supplementary research that covered electronic resources. However, this information is not reported in its main data collection for the given year.

Column Categories

1 - General library information and point of contact
2 - Library staff (professional, support, students)
3 - Library expenditures (library materials, salaries and wages, etc.)
4 - Library collection (printed volumes, microform, serials, film, video, etc.)
5 - Library services (circulation, interlibrary loans, other)
6 - Branch libraries counted
7 - Professional schools included (medical, law libraries)
8 - Library usage (public service hours, gate counts, reference transactions, other)
9 - Electronic resources (library)

Row Categories

L - NCES/IPEDS Academic Libraries Survey(1996)
CN - NCES/IPEDS Consolidated Survey (1996)
AC - ACRL (see ARL Main)
AR - ARL (Main -1996–1997)
O - Oberlin (1996–1997)

Findings

Based upon the most recently completed data collection efforts by IPEDS-L, IPEDS-CN, and the three professional associations, we find that NCES/ IPEDS-L offers excellent coverage of academic libraries data when compared to the private association and in-house counterparts included in this observation.

IPEDS-L recently introduced a section to its survey questionnaire covering electronic services (Part 9), a trend whose measurement is considered to be of significant value by the professional associations of academic library sciences. Closing a gap in its coverage of data, NCES/IPEDS presented a group of variables related to:

- electronic catalogs
- electronic indexes
- electronic full text periodicals
- electronic full text course reserves other electronic manuscripts or library aids created by the library staff
- library reference service by e-mail
- electronic interlibrary loan and document delivery system
- computers not designated for standard library functions
- computer software for patron use technology to assist persons with disabilities
- instruction by library staff on the use of internet resources.

Given growth in technology, college and university libraries could not be depicted as only facilities housing traditional collections of printed or bound volumes. Academic libraries also provide innovative learning resource centers that utilize new media technology and/or archive video, audio, virtual collections or a combination thereof.

As digital and internet/web-based technologies are used more and more in higher education programs, colleges and universities are faced with increased challenges of adapting those technologies within formal instructional settings. The Epiphany Project, a national experimental program that integrates library research and computer skills within a collaborative creative writing environment, is a good example of how education can be driven by trends in technology. Batson and Williamson (its creators) suggest that classroom instruction and learning can be enhanced if technology and information sciences are effectively utilized within the learning process.[22] As programs

[22]*The Epiphany Project, a two-year national grant project funded by an Annenburg/CPB grant, provides strategies and support to assist mainstream writing faculty with integrating technology into their classrooms. Currently, Epiphany is providing materials and workshops for over 40 institutions across the United States. Library scientists and*

BEST COPY AVAILABLE

such as Epiphany are typified within colleges and universities, there should be an increased need to evaluate academic information resources of academic libraries longitudinally.

In some cases, library resources offered (such as the convenience of technology) is a key factor in targeting markets for prospective university clientele. Although the doors to university libraries are opening to the general public and global society, primary institutional goals are generally focused to attract university clientele (students). This is precisely where ALS data can become functional, making university resources flexible to the evolving uses of the clientele. One particular institution taking this objective very seriously is the University of Phoenix, a private for profit, four year and postgraduate school.

The University of Phoenix provides programs and resources to fulfill the modern lifestyles of the working professional, its targeted clientele. Their unique market niche utilizes correspondence and distance (nontraditional) learning for those who might not have been able to benefit from the higher education process otherwise. Specifically focusing on its academic libraries, the University of Phoenix tests most traditional definitions (including NCES/IPEDS) that involve libraries which utilize tools and resources applicable to the nontraditional student. More specifically a large section of each of its libraries contain virtual systems that archive/house library collections on-line. These collections are made available conveniently to their clientele via off-campus access through the world wide web.[23] Earlier in this report, it was estimated that higher education represents a huge industry within the United States (14 to 15 million people enrolled by the year 2000). Given the trends of nontraditional learning, these figures should increase when distance and correspondence learning are taken into account.

The incorporation of the electronic resource section in the 1998 ALS presents a progressive first step by NCES/IPEDS toward a plan to include comprehensive development within academic library information services. Given these trends, figures should eventually include nontraditional collections and services provided within library environments such as those used by the University of Phoenix. Because the technology applied to academic libraries is so new, survey measures have not yet been formulated to quantify or measure the technological phenomenon associated with resource coverage. NCES/IPEDS and other academic library research organizations such as ACRL, ARL, and Oberlin will be faced with creating survey instruments that can cover new and pressing issues associated with technological innovation within the industry.

Another issue complicating the ALS coverage involves reporting branch libraries and their resources. Although NCES/IPEDS has made significant progress in its efforts to increase the quality of branch data reported, it is found that aggregate statistics reported by parent institutions do not necessarily isolate branch resources associated with them. In the recent surveys, NCES/IPEDS has attempted to alleviate this problem by assigning separate unit identification numbers for each branch of an institution. These efforts assumed that recognized branches would fully participate in reporting given the presence of a unique identifier. Unfortunately, this is not always the case. For example, the University of Phoenix possesses a variety of branch campuses located all over the country. Most of these facilities have been assigned separate IPEDS ID numbers, and yet they still report aggregate figures from their central campus in Phoenix (1996 and 1998 survey cycles). Despite the fact that IPEDS has attempted to distinguish these branch resources within its data, it remains difficult to track resources from one campus to another if they are buried in general aggregate data. Further, it is impossible to determine that all resources are included in those aggregate figures. In light of this problem, an alternative to this approach to institution and branch data coverage must be considered.

A partial remedy could lie in the way NCES/IPEDS treats professional school data coverage. To isolate the data requires a means to control for a given descriptive characteristic that would indicate that parent institution statistics included or excluded the branch data. A partial solution would be to identify professional schools represented in the data (law, medical, business, etc.). In most cases, colleges and universities often house their professional schools on separate self-contained campuses. If a way could be found to

on-line information services play a major role in this innovative education program. It was introduced by Trent Batson, Ph.D., Gallaudet University and Judy Williamson, MA, George Mason University. (See http://mason2.gmu.edu/~epiphany/.

[23] *(See http://library.uophx.edu)*

control for these colleges and university branches, it might be possible to isolate their library resources in the data. Though this would not distinguish all branch data, it would identify inflated statistics from professional schools that could substantially skew parent institution academic library data. Consider the following case study that compared federal depository resources of a major university and its law school, both located in Florida.

Stetson University's DuPont-Ball Library (Deland, FL) is designated as a federal depository.[24] It should be noted that ALS reporting for Deland does not specifically list the law school as a branch campus, though it is assumed that their data are included in the resources listed by the university in the ALS. The interesting point made here is that not only the library in Deland is designated as a depository, but the law school branch campus in St. Petersburg is also. Given the absence of specificity within the data collected, it is impossible to conclude that academic library resources at the law school are fully accounted for in parent institution data. It is therefore rational to assume that not all branch libraries and their resources are positively enumerated within parent ALS aggregate statistics reported. In this particular case, it cannot be verified that the law school collection (depository) is included in the data reported by the main campus library. Given these facts, it is very hard to isolate branch data (micro data) in ALS (macro data) coverage.

IPEDS does offer an indirect bridge linking survey data obtained from the parent institution to its branch institution data. The key to this relationship is finance data collected by IPEDS. Referring back to the case study involving Stetson University, it is known that the university does include its law school finance data in the aggregate statistics reported from the Deland campus. In fact, the law school is specifically listed as a branch campus within the data. Therefore, one might assume that law school federal depositories are covered in the ALS data obtained from the university. However, finance data information cannot be directly applied to the ALS. The two data sources are mutually exclusive even though they are both a part of the NCES/IPEDS survey packet sent out to institutions all over the country, and what may be true about one survey may not be true for another. In this case specifically, it cannot be determined that law school library collections, such as the federal depository collection, are included in the aggregate statistics reported by the main campus in Deland. This obstacle somewhat compromises the value of ALS data.[25]

Recommendation

ARL and ACRL provide a simple solution to the problem of professional school data existing within parent institution statistics. ALS should add the following questions:

- Are medical library statistics included?
  __Yes
  __No
  __No Medical Library

- Are law library statistics included?
  __Yes
  __No
  __No Law Library

By asking these questions, we can delimit the spurious effects of not being able to distinguish the existence professional school data in parent institution ALS statistics. By making these distinctions, we can better understand ALS data being collected (what data is included or not included in aggregate reports). A small scale reliability test is also advised to compare branch facilities with aggregate data reported by individual ALS units.

---

[24] *Criteria for establishing a federal depository require that only one depository library will be designated within a single congressional district. In the case of Stetson, both its law school and its main campus are designated as depositories and are based in separate congressional districts. NCES/IPEDS data indicate that only the parent institution in Deland has an IPEDS identification number.*

[25] *George Arnold (American University, Washington, DC), Director of Archives suggested that NCES/IPEDS information would be more useful if it indicated whether or not professional school holdings were included in the data reported by the parent institutions.*

CHAPTER 3. UNIVERSE COVERAGE

Section 3.0 Universe Listings and Methodology

Chapter 3 compares the NCES/IPEDS ALS universe to other professional and private listings specifically related to academic libraries and information services. The following table outlines the type of lists used and who created them.

Sources selection for the evaluation of ALS universe coverage took into account the following criteria: branch data, library science programs and accreditation, technological application and web access, professional associations, and institutional collections. Academic libraries located outside the 50 states and the District of Columbia (regardless of territorial affiliation), private foundations, and military institutions were omitted from the comparison. In the case of branch libraries, information about their respective parent institutions was assembled into a database and electronically matched to the active NCES/IPEDS universe to assess coverage. In this evaluation, institutional coverage is affirmed when an institution name is electronically matched to the institution listed in the overall NCES/IPEDS general universe. It is assumed that if an institution is listed in NCES/IPEDS overall universe, then that institution was a possible qualifying participant in the ALS. Participation within the survey was based upon qualifications establish by NCES/IPEDS which define what an "academic library" is.

Data Type	Universe Assembled By[26]
Branches	American Libraries Directory (1997–98, Volume 1)
Library Science Programs	American Libraries Directory (1997–98, Volume 2) American Libraries Association (Accredited LS Programs)
Associations	Association of Research Libraries The Oberlin Group
World Wide Web Access	University of Florida's Web Listing of Colleges and Universities
Archives Special Collections & Academy Certified Archivist	Government Printing Office Web Listing of Federal Depositions University of Idaho/Abraham's Listing of Special Collections Academy of Certified Archivists
Professional School Libraries	American Bar Association List of Approved Law Schools
General	Peterson's Guide

[26] *Units not matched in this chapter can be found in Appendix D of the paper.*

Section 3.1 Universe Comparisons

Branches – American Library Directory Volume 1 (1997–1998)

Published by R.R. Bowker, the American Library Directory (ALD) is revised annually to reflect library incomes, personnel, expenditures, and automation capabilities of branch libraries. ALD was listed by American Libraries Association (ALA) as one of the most comprehensive directories of its kind within the United States, Canada, and Mexico. ALD's universe of libraries is sorted into the following categories: armed forces, college and university, local and federal government, junior college, medical, law, public, religious, and special libraries. The institution list was compiled from ALD branch listings in Volume 1. This resource allows for multiple classifications such as the religious academic library. The comparison focuses primarily on two categories: 1) college/university and 2) junior college academic libraries.[27] Findings are summarized in the table below.

	Branch	Institution*	NCES/ IPEDS Not Covered
ALD Academic Libraries Count	4,707	2,723	93
**ALD institutions figure was compiled from branch listings in ALD Volume 1 (1997–98)*			

Most of the institutions found from this resource (ALD Volume 1) received ALS in 1998. Of those institutions matched, a majority currently receive Title IV funding and/or offer degree programs. Those who do not receive ALS will get either the IPEDS-CN (Consolidated Survey) or the IC4 (Institutional Characteristics Survey) surveys.[28] IPEDS-CN and IC4 recipients were fewer than ALS recipients in 1998.

It was found that 93 institutions from this data resource are not covered within the NCES/IPEDS universe, representing a 3 percent population gap.

[27] *ALD identifies academic libraries as including the main, departmental, or special libraries associated with an academic institution.*

[28] *IC survey only asks the primary question: Do you have a library?*

BEST COPY AVAILABLE

ALD Volume 1 provided an excellent source to compare institution coverage within NCES/IPEDS universe. This evaluation recommends that ALD Volume 1 be further utilized to assess the quality of coverage associated with NCES/IPEDS ALS branch data in the future.

Library Science Programs – American Library Directory Volume 2 (1997–1998)

ALD 1997–98 Volume 2 provides an institutional listing of library science programs found at institutions all over the United States. In addition to this listing, a comprehensive secondary list of first professional degree programs that are accredited by the American Library Association (ALA) is presented in ALD Volume 2. In the secondary ALA accreditation list, accreditation standards were adopted by an ALA committee on accreditation formed in 1972. The actual ALD listing of ALA accredited schools was obtained from a committee deliberation in March 1989. To compare the data to the NCES/IPEDS universe, ALD Volume 2 data were converted manually from printed text form to a data base file and matched electronically to the NCES/IPEDS universe. The result of that comparison is found below.

	Schools and Programs	ALA Accredited Programs	Coverage NCES/ IPEDS
ALD Institution Count	168*	47*	100%
**ALD Volume 2 (1997–98)*			

Units compared in both categories are completely covered in the NCES/IPEDS universe. A majority of ALD Volume 2 institutions, as well as ALA accredited institutions, will participate in the NCES/IPEDS ALS 1998.

Associations – ARL and Oberlin

In this section, two academic library associations are compared to the NCES/IPEDS universe: Association of Research Libraries (ARL), and the Oberlin. Their institutional member lists were manually keyed into a data base and electronically compared to the NCES/IPEDS universe. Results are presented below.

	ARL	Oberlin	Coverage NCES/ IPEDS
Members	93	73	100%

Members listed by ARL and Oberlin are covered 100 percent in the NCES/IPEDS universe. These associations go well beyond basic participation in the ALS. Both ARL and Oberlin sponsor representatives in the NCES/IPEDS technical work group for ALS. ARL is primarily known for representing major research universities all over the country. Oberlin is an association of higher education institutions representing the largest undergraduate populations most likely to pursue graduate-level education. Both associations recognize that academic excellence is directly related to quality research within the academic library.

Web List – University of Florida

The University of Florida maintains a web site linking a variety of American universities granting bachelor or advanced degrees. A data base list of these colleges and their URLs (Uniform Resource Locator / Web addresses) was adapted and electronically matched to the NCES/IPEDS universe listing. It is assumed that if a college maintains a web site, its students should have access to the world wide web. Given the discussion presented earlier addressing web technology and the modern academic library, it is highly likely that these institutions will maintain a web site outlining their academic libraries/resources as well. A comparison of this list with NCES/IPEDS is presented below.

BEST COPY AVAILABLE

	Count	Coverage NCES/ IPEDS
University of Florida List of American Colleges and Universities*	1,167	99%
Source: http://www.clas.ufl.edu/CLAS/american-universities.html		

After comparing the lists, the web site of American Colleges and Universities maintained by the University of Florida primarily consisted of institutions that are scheduled to participate in the next NCES/IPEDS ALS. Where a web site link listed more than one college or university (i.e., state university systems), only one of the institutions was selected and matched within NCES/IPEDS coverage evaluation. Sites that did not provide a stable link to an institution were excluded from the analysis.

Not all qualifying institutions listed by University of Florida were included in the NCES/IPEDS universe. Regardless of this fact, the quality of coverage remains exceptional here based upon the small gap (12 institutions), only 1 percent of that population. Those types of institutions not covered by NCES/IPEDS ALS in the Florida list included: religious schools, institutions offering distance learning programs, and those newly emerging schools such as Florida Gulf Coast University (in operation for just two semesters). These three institution types are typical characteristics associated with the continuously changing NCES/IPEDS higher education universe.

Archives Special Collections and Academy of Certified Archivists

Federal Depositories

The Government Printing Office - Federal depository list provides information on approximately 1,400 federal depository libraries throughout the United States and its territories. At least one depository is located in almost every congressional district. The data supplied by this list includes the following: institution name, library type, address, phone number, and congressional district. Not all libraries listed are academic libraries and the list used here excludes those institutional types not represented or intended for inclusion in the NCES/IPEDS universe. Coverage comparison of federal depositories is shown below.

	Count	Coverage NCES/IPEDS
Federal Depositions in Academic Libraries*	904	100%
Non academic libraries are removed. http://fedbbs.access.gpo.gov/libs/profiles.htm		

Although there are many other federal depositories located all over the United States (in state libraries etc.), 904 of these special collections are housed in academic libraries across the country. All of these facilities currently participate in ALS. One hundred percent of all federal depositories housed in academic libraries are represented in the NCES/IPEDS universe. All of them will receive 1998 ALS.

Even though 100 percent coverage is projected for this sub universe of federal depositories, ALS still does not have the capacity to verify that these resources are included in the aggregate statistics obtained from their institutions. Earlier on in this evaluation, a case study on Stetson University affirmed this finding. ALS could not isolate special collections such as federal depositories, nor could it verify that depositories held by branch institutions and their parent institution are included in the aggregate data collected. It was determined that further research and evaluation of professional school and branch data could help us to correct some flaws continuously revisited in the ALS. More specifically, the quality of coverage could be enhanced if a couple of questions were included in the survey questionnaire that stated whether or not professional schools housed at branch facilities are included in the aggregate data reported by an institution. Either the colleges and universities can be directly contacted after the ALS is submitted or questions can be added to the ALS such as the ones described in Section 2.3 of this evaluation to determine whether professional school data are included in parent institution reporting.

BEST COPY AVAILABLE

Repositories and Special Collections

Currently celebrated as one of the most comprehensive world wide web resources of its kind, T. Abraham's list offers more than 2,400 web sites that refer to special manuscript holdings, archives, rare books, historical photographs, and other primary sources for the research scholar.[29] Not all these sites represented exclusively academic library collections/ institutions. Academic sites were isolated from the list and compared to the NCES/IPEDS universe. The underlying assumption of this comparison: if special collections are held by institutions for higher learning, then they should maintain the academic libraries to house them.

The following criteria were used to distinguish non academic from academic institutions in Abrahams' listing. The repository/archive/or collection had to contain the web site URL extension ".edu," and/or the institution name had to include the word "school, university, college, or institute." Multiple institutional listings and branch campuses were omitted from this coverage comparison. If a site listed several branches of a university, or a list of affiliated schools (i.e., state university systems, etc.), only one campus was recorded and compared.

By utilizing T. Abraham's list, it can be determined to a limited degree whether or not a variety of institutional holdings could be represented in NCES/IPEDS statistics obtained from the ALS. However, there is no specific reference to special collections within NCES/IPEDS data.

	Count	Coverage NCES/IPEDS
Abraham's List*	610	100%

**Non academic libraries, multiple listings, and branch campuses are excluded.*
Source: http://www.uidaho.edu/special-collections/Other.Repositories.html).

All qualifying institutions in T. Abrahams' list currently exist within the NCES/IPEDS universe. The majority of these institutions will/do participate in ALS. Although parental institution participation in ALS can be assessed, specific collections listed by Abraham and others cannot be identified within the data reported by their parent institutions. Analysis here is limited by the parameters set by ALS data which does not identify specific resources held by any given institution listed.

The Academy of Certified Archivists (ACA)/Society of American Archivists (SAA) lists 39 academic and professional training programs in archival education all over the country. ACA/SAA (founded in 1989) seeks to advance the profession of archival education, promoting an understanding of archival goals, ethics, and standards. For purposes of this evaluation, it is assumed that if a program offers archive certification, then it should possess the tools associated with the area of study (an archive collection as well as the academic library to house it). Findings are presented below.

	Count	Coverage NCES/IPEDS
ACA/SAA Archival Education Institutions*	39	100%

**Non academic and Canadian libraries are excluded.*
Source: http://www.archivists.org/education/prog.html.

All ACA/SAA program institutions are included in the NCES/IPEDS universe. Most of these institutions listed currently receive the ALS.

Professional

The value of professional schools is often linked to the quality of resources available to students and faculty. The Law School Data Assembly Service/Law School Admissions Test (LSDAS/LSAT) list is utilized to assess whether or not academic libraries of American Bar Association (ABA) approved law schools are adequately represented in the NCES/IPEDS universe of academic libraries. Library resources are an important issue for schools interested in obtaining ABA approval. ABA approval is partially based upon whether or not an institution maintains an academic library. Although it cannot be determined by just looking at ALS data whether or not ABA libraries are fully represented in

[29] *This institutional listing is protected by copyright law. T. Abraham is affiliated with the University of Idaho.*

BEST COPY AVAILABLE

aggregate statistics reported, it can be ascertained if parent institutions associated with the law schools are represented in the NCES/IPEDS universe - and more specifically the ALS universe. Findings of this comparison are presented below.

	Count	Coverage NCES/IPEDS
LSDAS/LSAT Institutions*	174	100%

**Puerto Rican and military institutions are excluded.*
Source: 1998 LDAS/LSAT Information Book.
See also http://www.abanet.org/legaled/approved.html

All ABA approved law schools (their parent institutions) exist within the NCES/IPEDS ALS universe. It is important to note that in some cases, where a law school did not possess its own NCES/IPEDS unit ID number, main campuses are assumed to record their data as a branch facility. These institutional types are essentially problematic for ALS, since there is no way of identifying whether or not the parent institution statistics include professional school data in their ALS aggregate data response. Further research regarding branch institutional data is warranted given the existence of this anomaly.

General

Peterson's Guide is known for its broad range of information covering a variety of institution characteristics - student population and resources at two year to four year colleges and universities all over the country. Peterson's was selected as a good general reference source given its inclusion of basic statistics associated with volumes, etc., held within its universe of academic libraries. Findings from a comparison of Peterson's to NCES/IPEDS are presented below.

	Count	Coverage NCES/IPEDS
Peterson's*	3,310	99%

**U.S. colleges and universities only. Puerto Rican and military institutions are excluded.*

Only 29 out of the 3,310 institutions could not be matched to NCES/IPEDS universe, less than 1 percent population gap. Given the low percentage gap, it is logical to conclude that NCES/IPEDS universe adequately covers institutions recognized by Peterson's Guide. Of those institutions not matched, some might represent corporations or private institutions that do not offer degrees. Also, non matched institutions could include branch campuses which are technically already covered in the NCES/IPEDS universe.

Summary of Findings and Recommendations

The above comparisons in this chapter indicated that NCES/IPEDS ALS is a sophisticated and thorough survey covering most of the academic libraries population within the United States.

Because IPEDS takes great care in the classification and discovery of newly emerging institutions, the current ALS universe is notably accurate and up to date; a challenging accomplishment given the constant changes experienced within the ALS universe.

The quality of coverage needs to be revisited. It is recommended that the database created from ALD branch listings (aggregating statistics for an institution) be expanded to include more institution characteristics. These data should then be compared to parent statistics obtained from ALS reports. The comparison should reveal whether or not branch resources are adequately represented in the data reported by ALS.

BEST COPY AVAILABLE

CHAPTER 4. FIELD REPRESENTATION AND QUALITY OF DATA COLLECTION

Section 4.0 Methodology

This chapter evaluates the quality of coverage based upon the perceptions of library representatives and IPEDS staff. These individuals determine to what extent organization and distribution of the ALS are carried out at the regional level. Value attributed to their function is directly related to organization of the resources allocated to execute survey distribution, the quality of survey delivery, increased perceptions and understanding of the survey instrument, and how well the data are collected.

Since its inception in 1966, NCES/IPEDS has never organized a survey evaluation of ALS based upon field representatives' observations. In the past, representatives initiated feedback on their own with regard to the efficiency or effectiveness of survey distribution or data collection within their regions. This chapter will attempt to ascertain whether or not organized field representative feedback could prove useful when identifying key problems and strengths associated with ALS distribution process.

Section 4.1 Survey Interview Questionnaire

Created to evaluate perceptions of the 1996 ALS survey distribution, Appendix B contains a follow-up interview/questionnaire (code book) which was distributed to ALS representatives to measure their perceptions of ALS. Their perceptions were evaluated according to: degree of participation with survey distribution, perception of ALS questionnaire format, layout and design, the treatment of branch data, electronic reporting of the data collected, and the completeness of coverage within the NCES/IPEDS universe.

Section 4.2 Participants

Survey interviews were mailed electronically to approximately fifty people. The data collected from the survey interview and the program to read the data were compiled by using Statistical Analysis Software (SAS). The SAS program can be seen in Appendix C of this paper. Thirty out of fifty field respondents returned the interview, producing a 60 percent response rate. The following states were represented in the data: AL, AR, CA, CO, CT, DE, GA, IL, IN, LA, MA, MD, ME, MI, MO, NC, ND, NJ, NV, NY, OH, OR, PA, SC, SD, TN, VA, VT, WI, and WY. A coordinator percentage table of participation is shown below.

Year	Percent Participating	Number Responding (N)
1992	76%	22
1994	83%	24
1996	93%	27

Field respondents were asked to identify which years they personally participated (1992, 1994, and 1996) in ALS for three survey cycles. Findings suggest that at least three-fourths of the 30 respondents in this interview directly participated with the distribution of ALS. Those not participating are assumed to have delegated the ALS task to their affiliated colleagues or they hold new positions within the ALS organization structure for distribution and collection.

Section 4.3 Survey Format

Survey format can affect the quality of data reported/covered for a region. Representatives were asked to assess whether or not responding institutions in their respective regions were easily able to understand the questions asked on form IPEDS-L 1996 (ALS). With 29 responding to this question, 76 percent of ALS representatives indicated that responding institution libraries could easily answer the questions asked by ALS. Among those respondents who indicated that the form was not easily understood, the following reasons were given:

- Budget breakdowns are confusing. For example:
  - FTE staff/students
  - Electronic resources
- Respondent institution interpretation of the definitions varied in some cases.
- Shaded areas did not reproduce well in the Xerox/copy machines.
- Some of the data are not easily counted and do not provide useful information to the responding institutions themselves (counting microfiche).

Based upon the complexity of the data collected by ALS, we find that total net figures can be inconsistent due to the differences by which breakdowns are calculated and recorded at the institutional level. Secondary use of data is limited to the parameters set by the original data collector. Data must be coordinated in a way that integrates the myriad of data sources. A specific way to counteract problems with integrating ALS data would be to eliminate any possible confusion by making the definitions associated with the data collection more specific and reader focused. For example, in the case of full-time employee figures for academic library staff and full-time student academic library staff, instructions should indicate to the institutions exactly what information is needed, and who would qualify as full-time staff in either category of academic library employment.

Why is FTE problematic to field representatives? In one interview, it was indicated that he or she felt as if full-time staff figures over full-time student staff figures were more reliable. This is not surprising since there is a high turnover of student staff versus regular full-time employees within an academic year. ALS would only provide a snapshot of the given phenomenon. This is precisely why the definitions for staff should be specific enough to address/factor out high turnover rates within student sub-population of that full-time workforce. In fact, all data collection areas should take into account the standard practices existing within the respective occupational or resource units as they are discovered.

Through its advisory committee, ALS has provided an excellent means to keep the instrument and its data collection current with industry, specifically lending focus to the changes in technology. In one survey interview, it was suggested that ALS should maintain the same questionnaire over time (longitudinally), so that continuous collection of ALS data would be made easier for participating institutions. In part, utilizing the same survey questionnaire over time would streamline data collection and timeliness associated with coverage. However, this approach would not be responsive to the peculiar nature of the academic libraries market.

Noted earlier in this evaluation, technology is continuously redefining the role/function of academic libraries and their employees. Realizing the true nature of the change, even professional associations such as ARL, ACRL, and Oberlin could agree that as roles change, so should the type of data collected for academic libraries. Institutions and policy makers evaluate resources carefully in order to make the necessary changes to modernize or increase the quality of libraries services offered to the various enclaves of an academic library clientele all over the country. The data must remain current with the times for the modern academic library to move forward by offering resources and services that are needed (area specific), or that might enhance education offered by the various institution types. The South Dakota library network is a prime example of this occurrence, with bibliographic card catalogues, serials maintenance, acquisitions tracking, on-line interlibrary loans, access to hundreds of journal titles (full-text), index of several thousand journals, access to several bibliographic and reference tools such as Books in Print and Sioux Falls Argus Leader Index, cost indexing for systems upgrade (software and hardware) among the several areas affected by technological change in South Dakota. Such examples are typical of the academic library industry.

Respondent feedback is useful in determining the extent to which information being collected on new technology is useful to policymaker and institutional goals. Variables in ALS must continuously be evaluated for their application. While South Dakota indicated that the use of new technology variables was helpful in their institution resource evaluation, "tidy net figures" did not identify enough specific indicators of those variables to satisfy their interest in electronic resources. If a pattern among field representative opinions regarding the technology (electronic resources) variables could be observed, then ALS format could be updated for future survey cycles. If a pattern is not observed, then institutions interested in additional information could adapt their individual collection effort to include a breakdown in the information requested. Not only is the NCES/IPEDS objective achieved, the instrument also covers data needed for focused institutional purposes. SUNY Colleges (NY) have utilized this approach to collect specific information in addition to the data requested for the ALS. In any case, field respondent input is a valuable resource that could be utilized by NCES/IPEDS in future ALS cycles.

Section 4.4 Data Reporting and Institution Coverage

Non accredited Institution Reporting

Part of the U.S. Department of Education's primary goal is to identify all education resources available at the regional/national levels. It was discussed earlier that the NCES/IPEDS universe is undergoing significant changes in 1998. One of the areas affected the most by this change is non accredited institution participation. Sixty-one percent of responding field representatives (N=21) felt that these types of institutions should be included in the NCES/IPEDS data collection, but that their data should not be included in the aggregate data when reported. In any case, the intended changes in the NCES/IPEDS universe will constitute an approximate increase of 3,500 institutions to the current NCES/IPEDS universe.

Electronic Reporting

Over the last three completed survey cycles (1992, 1994, and 1996), electronic reporting has increased among ALS coordinators and library representatives, as summarized below.

Year	Percent Participating in ALS Via Electronic Medium	Package/Software Available
1992	52%	IDEALS 2.0
1994	69%	IDEALS 3.0
1996	79%	IDEALS 4.0

In 1992, IDEALS 2.0 software was used to report electronically in the ALS. In 1994, IDEALS 3.0 was used. During those years, there were some states that reported problems associated with importing the data from external systems to the IDEALS format. Since that time, NCES/IPEDS created IDEALS version 4.0 in-house to combat many of these problems—including the option of offering a universal text-based format to import from external systems into IDEALS. Of the 24 field representatives who utilized the software, 88 percent did not have any problems reporting electronically in the 1996 ALS. This would indicate that NCES/IPEDS is improving the data collection process by utilizing the electronic format. The increase in the number of field representatives who are using the software indicates the changes in format have been successful. Electronic reporting should decrease the amount of time needed for regional coordinators to transfer ALS data to IPEDS.

Section 4.5 Recommendations

Field opinions offer a wide range of information which could serve to maintain a constant evaluation of ALS. All of the issues addressed here, in some way, affected the coverage of data reported in ALS. Based upon this fact, NCES/IPEDS should continue to include field representative participation in ALS feedback.

Field representative data should be collected in the best way possible without adding cost to ALS. Given the interest in institution reporting and data collection regarding coverage quality, target population of the field process would primarily be focused on those individuals who are transferring the information collected from the institutions to NCES/IPEDS. Given the substantial increase in the use of the IDEALS software, electronic format could be the key to this proposed means of continually evaluating the ALS.

It is suggested that an additional step be added to the data transfer function within the IDEALS format. Before the data could be integrated within the IDEALS system, field respondents would have to quickly answer a small set of questions regarding the quality of coverage experienced within a particular survey cycle. These questions might include: criteria assessing ALS participation, questionnaire format and content, as well as data reporting, and possibly a tailored set of questions which evaluate new sections covered in the most recent instrument (i.e., electronic resource section in the 1998 version). This proposed change should not greatly increase the reporting burden of the field representative. Its utility would increase NCES/IPEDS awareness regarding the quality of ALS coverage at the field level.

BEST COPY AVAILABLE

CHAPTER 5. PUBLIC VERSUS PRIVATE REPORTING

Section 5.0 Methodology

Applying a Secondary Sample

This section explores the extent to which public institution reporting is dissimilar to private institution reporting within the ALS. To make this comparison, a segmented panel was obtained from a comprehensive stratified sample generated from a separate evaluation/crosswalk of the 1996 IPEDS universe.[30]

In that NCES/IPEDS universe coverage evaluation/crosswalk,[31] ratio compilations for the stratified population figures were obtained by comparing NCES/IPEDS sectors to the total population size of the NCES/IPEDS universe. This paper utilized one single defined/isolated segment of that sample, including only those institutions who could have (by 1998 definition) received the ALS in 1996. The segment of interest included those higher education institutions that offered Title IV federal funding and provided higher education degree programs. However, because the sample segment is utilized as a secondary tool of analysis, it is necessary to determine whether or not the rate of ALS participation (stratified character of the segment) was maintained after the data were applied specifically to this ALS evaluation .

After reviewing the stratified structure containing the segment panel, it was found that the criteria outlining the 1998 IPEDS universe could not be precisely applied to the 1996 data (an ALS universe subset). To be specific, some institutions that would have received ALS in the 1998 distribution, and who were selected for the sample, did not receive ALS in 1996. This anomaly was minimal.[32] Data comparison would have been more reliable using 1998 data (currently unavailable), because intended distribution within the segment would have met the criteria set within the greater 1998 comprehensive NCES/IPEDS universe. Because this paper utilizes the sample as a secondary tool of analysis, it is limited to the scope of the sample's original intention, as well as the previous criteria used to define that universe.

Regardless of the integrity maintained by the IPEDS segment, sub universe characteristics remain basically consistent despite the above mentioned anomaly. After examining sector by Title IV and degree granting status ratios within the segment of the sample, it was found that Sectors 1, 2, 3, and 5 institutions were covered in the 1994/1996 ALS data 100 percent. These sectors would include: all four year institutions (public, private for profit, and private nonprofit), and two year private nonprofit institutions meeting the Title IV and degree characteristics used to stratify that sample.[33] Ninety-three percent of the public two year colleges were represented in the sample, an acceptable ratio of participation as well. However, representation of qualifying Sector 6 two year for profit schools (based upon the 1998 definition) was low; a 32 percent rate of participation. Because the goal of this chapter was not intended to reflect the precise nature of the sample

[30] *Created by Janice Plotczyk and Christopher Marston (Bureau of the Census, Governments Division, Program Evaluation Branch) for NCES.*

[31] Segment of a stratified sample.

[32]

Differences Between the Comprehensive Coverage Sample and the Segment Panel (Participation Rate)

Sector	*Sample Size*	*Segment Size*
1. Four year Public	*23*	*23 (23/23=100%)*
2. Four year Private Nonprofit	*59*	*59 (59/59=100%)*
3. Four year Private for Profit	*6*	*6 (6/6=100%)*
4. Two year Public	*42*	*39 (39/42=93%)*
5. Two year Private Nonprofit	*8*	*8 (8/8=100%)*
6. Two year Private for Profit	*19*	*6 (6/19=32%)*

[33] *If an institution did not qualify for the sample based upon the absence of Title IV federal funds or degree, then it was excluded from the segment panel observation.*

BEST COPY AVAILABLE

drawn for the comprehensive study, it is believed that the segment of that sample utilized here is sufficient to draw general conclusions of reporting between public versus private institutions who receive the ALS. The likelihood of the patterns should remain consistent for Sector 1-5 institutions observed here given the participation rates calculated. Only sector six observations could prove to be weak, because they represent a low participation rate within the stratified structure. Despite this unforeseen complication, it is believed that the observations made here between public and private institutions should be typical of the sample, reflecting a propensity which could be generalized to the greater NCES/IPEDS population.

Comparing the Data

Utilizing the sample described above, an electronic database was assembled for this section to include both 1994 and 1996 survey cycles of the ALS. It showed the presence or absence of reporting for seven categories within the ALS survey.[34] If an institution answered any question within a given category, then the presence of reporting was recorded for that category. Findings of that comparison are as follows.

Section 5.1 Findings

Public Institutions (Colleges, Universities, Vocational and Trade Schools)

Regardless of institution level, 65 public institutions are represented in the segment panel.[35] A majority of these institutions currently receive federal funding and offer advanced degrees. Given the size of student populations, and considering the likelihood that four year institutions would receive more funding than their junior two year counterparts, it is possible that differences observed in participation and the extent of the data collected are associated with resource availability. One might expect four year public universities to receive more federal and state funding than their two year public institution counterparts. Given the importance of electronic resource capability in ALS distributions, attention is focused directly toward Part G of the 1996 ALS electronic resources.[36]

Reporting patterns for Part G within the 1996 ALS cycle indicated that two out of twenty-three Sector 1 institutions (9 percent) and 6 out of 39 Sector 4 institutions (15 percent) within the sample reported the absence of electronic resources at their school. Because not many of the public institutions included in the segment panel reported an absence of electronic resources, we can conclude that electronic reporting would probably be an acceptable and viable means to collect data for public higher education institutions. [37]

Of those who did not indicate that they had the means to report electronically, it is expected that two year institutions will have a harder time reporting than their four year public institution counterparts. Because public institutions are required by law to participate in the ALS (due to Title IV funding), the only logical reason for noncompliance could only be the absence of resources necessary to report.[38]

Private Institutions

Sectors 2, 3, 5, and 6 of the panel comprise data reporting for all private four year (for profit and nonprofit) and two year (for profit, nonprofit) institutions. Regardless of level, 79 institutions represent private schools within the panel. A majority of these schools receive federal funding and offer advanced degrees. After out of scope reporting was removed from the observation, and electronic reporting was considered, only four institutions (three Sector 2, and one Sector 3) reported the absence of any electronic resources in the 1996 ALS. Therefore,

---

[34] *Number of public service outlets in a fiscal year, library staff (fall), library expenditures for the fiscal year, library collections for the fiscal year, library services for the fiscal year, library services for the typical week, and electronic services.*

[35] *Sectors 1 and 4 units in the panel represented data reporting for public two and four year plus institutions.*

[36] *Those schools not answering the questionnaire for either of the two survey cycles (1994 and 1996) were omitted from the observation because it could not be determined whether or not the institution possessed adequate electronic resources if ALS was intentionally ignored during both cycles.*

[37] *Please note that institution patterns observed here are limited to the general parameters reflected in the panel segment extracted from the scientific sample utilized in the overall universe coverage evaluation for IPEDS.*

[38] *Assuming the stratified features of the segment remain intact over time.*

electronic reporting would be a feasible option for private institutions regardless of IPEDS sector distinctions. Just as their public counterparts, private universities could not justify poor response rates based upon the lack of electronic resources (resources which would make the process easier.)

Private Versus Public Reporting

In this subsection, non reporting is assessed by the absence of data for any of the seven subcategories discussed in the introduction to this chapter. The following (responses were recorded for the following sectors: Sector 1=0, Sector 2=5, Sector 3=1, Sector 4=2, Sector 5=0, and Sector 6=1.

It can be seen here that total selective non response to ALS did not include that many qualifying institutions within the sample. Of the six IPEDS sectors covered by the ALS segment, Sector 2 institutions would appear to be the most problematic (four year private nonprofit institution category). The majority of non response here included religiously affiliated institutions (e.g. Talmudic and Rabbinical schools). In decreasing order, Sectors 4 and 3 followed Sector 2. These sectors represent primarily two year institutions (technical and community colleges). Together, 6 institutions out of 150 selected not to participate in the ALS, a non response rate of 4 percent within the segment panel. Given non response rate here, it is understood that 96 percent of the sample responded to at least one question in the 1996 survey cycle.

Suggestions

Although we have observed a steady pattern of response between public and private ALS qualifying institutions, is it possible to enhance the quality of reporting given what is known from the sample, based on institution sector type for ALS?

Two factors can be considered:

1. Mandated participation
2. Timeliness

Given the presence of federal funding for most of the institutions participating in ALS (they receive Title IV funds), response rates could be increased if system components were put into place which could reinforce mandated participation. For example, federal funding could be pulled if a remedy for compliance was not achieved. Although this remedy could be functional for federally funded institutions and their compliance with ALS, it would not function the same way for those institutions that do not participate in Title IV programs. NCES/U.S. Department of Education would have to produce an alternative motivation for institutions such as this. Based upon the findings in this evaluation, timeliness of data dissemination is the key to motivation here.

It has been discussed earlier in this evaluation that not all private for profit institutions are required by law to participate in the ALS. Some do not receive federal Title IV funding. The only means to increase participation rate, or decrease non response rates would be to provide these schools with an incentive to take part in the ALS. Given what is known, it is possible that non Title IV institutions offer a large amount of resources currently not represented in the national ALS compilations. The question here would be: Is this information necessary for Congress (U.S.) to complete the libraries picture, so that they can allocate appropriations to academic libraries and programs accordingly? If the goal of collecting academic library data parallels this national function associated with program evaluation and budgetary allocation, then NCES/IPEDS must determine what motivation is necessary for non federally funded institutions to participate in the ALS. It was stated earlier that the only incentive that can be offered to this group of institutions would be to make ALS data available in a timely manner to the public. Other than federal government use of the data, the only reason why these schools would participate in ALS would be to gain the ability to compare their data and institution resources with another institutions of a similar type (e.g., same IPEDS sector) or colleges located within their respective region. Therefore, the need to alleviate the timeliness issue of data dissemination would dependent upon the inherent value that is placed upon non Title IV colleges.

APPENDIX A.

IPEDS-L Questionnaire 1998
IPEDS-CN Questionnaire 1998

OMB No. 1850-0582: Approval Expires XX/XX/XX

Form IPEDS-L
(03/16/98)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
Acting as Collection Agent for
U.S. DEPARTMENT OF EDUCATION
NATIONAL CENTER FOR EDUCATION STATISTICS

INTEGRATED POSTSECONDARY EDUCATION DATA SYSTEM

ACADEMIC LIBRARIES SURVEY 1998

NOTE --The completion of this survey, in a timely and accurate manner, is **MANDATORY** for all institutions which participate or are applicants for participation in any Federal financial assistance program authorized by Title IV of the Higher Education Act of 1965, as amended. The completion of this survey is mandated by 20 U.S.C. 1094(a)(17).

For those institutions not required to complete this survey on the basis of the above requirements, the completion of this survey is voluntary and authorized by P.L.103-382, National Education Statistics Act of 1994, Sec. 404(a).

Please read the accompanying instructions before beginning this survey. Report data for the institution in the address label. If data for any other institutions or branch campuses are included in this survey because they CANNOT be reported separately, please provide the names of these institutions as instructed below.

If there are any questions about this form, contact a Bureau of the Census IPEDS representative at (800) 451-6236 or FAX number (301) 457-1542, 7:30 a.m.--4:30 p.m. EST.

Please correct any errors in the above name, address, and ZIP Code.

DATE DUE: November 15, 1998

RETURN TO:

1. Name of respondent:	2. Title of respondent:	3. Telephone — Area code, number, extension
4. E-Mail address	4. FAX number (include area code):	

Please answer the following questions to determine if you need to complete this survey:

a.	Do you have an organized collection of printed or other materials or a combination thereof?	1☐	Yes	2☐	No
b.	Do you have a staff trained to provide and interpret such materials as required to meet the informational, cultural, recreational, or educational needs of clientele?	1☐	Yes	2☐	No
c.	Do you have an established schedule in which services of the staff are available to clientele?	1☐	Yes	2☐	No
d.	Does the library have the physical facilities necessary to support such a collection, staff, and schedule?	1☐	Yes	2☐	No

If you answered "Yes" to all of the questions above, please go to question e.

If you have answered "No" to any of the questions, do you provide financial support to another library? If "Yes", complete Part III on page 4. If "No", please return this survey to the address above.

e. Do you report data for yourself and for another library?	1☐	Yes→	Go to page 4, Part I and complete the entire survey, and return it to the address above.
	2☐	No →	Go to question f below.
f. Are your library data reported by another library?	1☐	Yes→	Go to page 4, complete Part II, and return the survey to the address above.
	2☐	No→	Go to Part A, line 01 and complete this survey.

BEST COPY AVAILABLE

Changes from the 1996 form for

1998 ACADEMIC LIBRARIES SURVEY

- **Cover sheet — Library definition**

  The definition of the library has been reformatted as a checklist. Also, the possibilities of reporting data FOR another library or having data reported BY another library have been clarified in connections with related changes on page 4.

- **Part B — Library Staff**

  In addition to reporting a total full-time equivalent (FTE) of librarians and other professionals, respondents are asked to report separate counts for librarians and for other professionals on the library staff.

- **Part C - Library Expenditures**

  - The title of this part has been changed to reflect the fact that in many academic libraries the term "operating expenditures" does not cover expenditures for staff or for information resources. Expenditures for "operating" (lines 20-23) are grouped under that subheading.
  - Expenditures for "books, serial backfiles, and other materials" are reported in two categories: paper and microform and electronic.
  - All expenditures for current serials are now reported on two lines: paper and microform and electronic.
  - Expenditures for search services and current serials are reported together.

- **Part D — Library Collections**

  This section has been reduced from 18 lines to 7 lines. Deleted items include manuscripts and archives (linear feet), computer files, and other library materials. Cartographic materials, graphic materials, sound recordings, and film and video materials are now combined under Audiovisual materials. The simplification involves two kinds of changes. Counts are now requested for selected types of material only, rather than for all. Also, for each type, respondents are asked to provide a physical count or a bibliographical count but not both.

- **Part E — Library Services**

  No content changes.

- **Part F — Library Services, typical week**

  No content changes.

- **Part G — Electronic Services**

  Video/desktop conferencing, satellite broadcasting, scanning equipment and services for distance education students questions were added to this part.

PURPOSE OF THE SURVEY

The National Center for Education Statistics (NCES) collects these data periodically to obtain and report a comprehensive picture of the status of collections, transactions, staff, service per typical week, and library operating expenditures in postsecondary institutions. The survey is being conducted in compliance with the Center's mission "to collect, and analyze, and disseminate statistics and other data related to education in the United States...," (P.L. 103-382, National Education Statistics Act of 1994, Sec. 404(a)).

USES OF DATA

Collection of these data over time will enable the nation to plan effectively for the development and use of postsecondary education library resources. Congress uses the data to assess the need for revisions of existing legislation concerning libraries and the allocation of Federal funds. Federal agencies need the data to evaluate and administer library programs. State education agencies and college librarians and administrators use the data for regional and national comparisons of library resources to plan for the effective use of funds. Finally, library associations and researchers use the survey results to determine the status of library operations and the profession.

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 1850-0582. The time required to complete this information collection is estimated to vary from 30 minutes to 6.0 hours per response, with an average of 2.5 hours, including the time to review instructions, search existing data resources, gather and maintain the data needed, and complete and review the information collection. **If you have any comments concerning the accuracy of the time estimates(s) or suggestions for improving this form, please write to:** U.S. Department of Education, Information Management Team, Washington DC 20202-4652. **If you have any comments or concerns regarding the status of your individual submission of this form, write directly to:**

National Center for Education Statistics/IPEDS
U.S. Department of Education
555 New Jersey Avenue, NW
Washington, DC 20208-5652

The definitions and instructions for compiling IPEDS data have been designed to minimize comparability problems. However, postsecondary education institutions differ widely among themselves. As a result of these differences, comparisons of data provided by individual institutions may be misleading.

DO NOT RETURN INSTRUCTIONS

BEST COPY AVAILABLE

NOTICE OF COMBINED DATA FOR MORE THAN ONE INSTITUTION OR BRANCH CAMPUS

I. **The institution named on page 1 of this survey is including Academic Libraries survey data for other institutions/branch campuses with separate UNITIDs.[39]**

Please indicate below, the UNITID, name, and address of the institutions/branch campuses for which data are included then complete the survey.

UNITID	Institution Name	Address	City	State	ZIP code

II. **The Academic Libraries survey data for this institution are reported by another institution.**

Please list the UNITID, name, and address of the reporting institution and return this survey to address indicated on page 1.

UNITID	Institution Name	Address	City	State	ZIP code

III. **This institution contributes financial support to a joint library with the following Postsecondary institution or public library.**

Please list the UNITID, name, and address of the reporting institutions and return this survey to address indicated on page 1.

UNITID	Institution Name	Address	City	State	ZIP code

[39] *UNITID code is a unique identification number assigned to postsecondary institutions surveyed through the Integrated Postsecondary Education Data System (IPEDS).*

PART A — NUMBER OF PUBLIC SERVICE OUTLETS, FISCAL YEAR 1998

Line No.	Item	Number
01	Branch and independent libraries — Exclude main or central library	

PART B - LIBRARY STAFF, FALL 1998
(Exclude maintenance and custodial staff)

NOTE: Report data to two decimals.

Line No.	Staff	Number of full-time equivalents (FTEs)
	Librarians and other professional staff:	
02	Librarians	.
03	Other professional staff	.
04	**Total librarians and other professional staff** (Sum lines 02 and 03)	.
05	All other paid staff (except student assistants)	.
06	Contributed services staff	.
07	Student assistants from all funding sources	.
08	**Total full-time equivalent (FTE) staff** (Sum lines 04 through 07)	.

BEST COPY AVAILABLE

PART C — LIBRARY EXPENDITURES, FISCAL YEAR 1998

NOTE: Do not report the same expenditures more than once.

Line No.	Category	Amount (Round to nearest whole dollar)
	Salaries and wages:	
09	Librarians and other professional staff	$
10	All other paid staff (except student assistants)	$
11	Student assistants	$
	Information resources:	
	Books, serial backfiles, and other materials:	
12	Paper and microform	$
13	Electronic	$
	Current serial subscriptions and search services:	
14	Paper and microform	$
15	Electronic	$
16	Audiovisual materials	$
17	Document delivery/interlibrary loan	$
18	Preservation	$
19	Other materials	$
	Operating expenditures:	
20	Furniture and equipment (exclude computer equipment)	$
21	Computer hardware and software (include maintenance)	$
22	Bibliographic utilities, networks, and consortia	$
23	All other operating expenditures	$
24	**TOTAL EXPENDITURES (sum lines 09 through 23)**	$
25	Employee fringe benefits (if paid from library budget)	$

PART D — LIBRARY COLLECTIONS, FISCAL YEAR 1998

Line No.	Category	Added during the fiscal year (1)	Held at end of fiscal year (2)
	Books, serial backfiles, and other materials (include government documents):		
26	Paper — Volumes		
27	Paper — Titles		
28	Microform — Units		
29	Electronic — Titles		
	Current serial subscriptions:		
30	Number of paper and microform subscriptions		
31	Number of electronic subscriptions		
32	**Audiovisual materials — Units**		

PART E — LIBRARY SERVICES, FISCAL YEAR 1998

Line No.	Category	Number
	Document delivery/interlibrary loans provided to other libraries:	
33	Returnable	
34	Nonreturnable	
35	**Total provided (sum lines 33 and 34)**	
	Document delivery/interlibrary loans received from other libraries or commercial services:	
36	Returnable	
37	Nonreturnable	
38	**Total received (sum lines 36 and 37)**	
	Circulation transactions:	
39	General collection	
40	Reserve collection	
	Information services to groups:	
41	Number of presentations	
42	Total attendance at all presentations	

BEST COPY AVAILABLE

PART F — LIBRARY SERVICES, TYPICAL WEEK, FALL 1998		
Line No.	**Category**	**Number in a typical week**
43	Hours open in a typical week	
44	Gate count in a typical week	
45	Reference transactions in a typical week	

PART G — ELECTRONIC SERVICES

This section requests information about the availability of electronic services in the library and elsewhere on campus and off campus access by your primary clientele, and other users.

Please respond to each item by marking an (X) in the appropriate column.

Line No.	Category	Mark (X) in appropriate column						
		Access from			Access off campus by			
		Within library (1)			Primary clientele (3)		Others (4)	
	Does the library or parent institution make available the following services?	Yes	No	No	Yes	No	Yes	No
46	An electronic catalog that includes the library's holdings							
47	Electronic indexes and reference tools							
48	Electronic full-text periodicals							
49	Electronic full-text course reserves							
50	Electronic files other than the catalog (e.g., finding aids, indices, manuscripts) created by library staff							
51	Internet access							
52	Library reference service by e-mail							
53	Capacity to place interlibrary loan/document delivery requests electronically							
54	Technology to assist patrons with disabilities (e.g., TDD, specially equipped work stations)							
55	Instruction by library staff on use of internet resources							
56	Electronic document delivery by the library to patron's account/address							
57	Video/desktop conferencing by or for the library							
58	Satellite broadcasting by or for the library							

PART G — ELECTRONIC SERVICES - Continued

Line No.	Category	Access from within library	
	Does your library provide the following services?	Yes	No
59	Computers not dedicated to library functions (for patron use inside the library)		
60	Computer software for patron use in the library (e.g., word processing, spreadsheet, custom applications, etc.)		
61	Scanning equipment for patron use in the library		
62	Services to your institution's distance education students (If your institution does not have distance education students, please check here)→ ☐		

REMARKS SECTION — *Please enter any remarks or comments you may have in this section. By entering any explanations here, you may eliminate the need for telephone contact at a later date*

BEST COPY AVAILABLE

GENERAL INSTRUCTIONS - L

Please respond to each item on this form in the space provided. If the appropriate answer is zero or none, use "O." If you do not collect data for an item, provide your best estimate. **PLEASE DO NOT LEAVE ANY LINES BLANK.** If a line is left blank, NCES will impute a figure using the average for institutions with similar characteristics. Include data for the main or central library and all branch and independent libraries that were open all or part of fiscal year 1998.

INSTITUTIONAL IDENTIFICATION

In the space provided on the front page of this report, make any necessary corrections to the preprinted address information. Also, please enter the name, title, area code and telephone number of the person responsible for completing the report.

PERIOD OF REPORT

Report information for the following time periods as specified in each section:

1. Fiscal year 1998 - Any 12-month period between **June 1, 1997 and September 30, 1998** which corresponds to your institution's fiscal year. (For Parts A, C, D, E, and G)

2. **Typical week, Fall 1998** - A typical week is one that is neither unusually busy nor unusually slow. Avoid vacation periods for key staff or days when unusual events are taking place on the campus or in the library. Choose a week in which the library is open its regular hours. Include any seven consecutive calendar days. (For Part F)

3. **Fall 1998** - The period during the fall of 1998 when the survey form is being completed. (For Parts B, F, and G)

PART A - NUMBER OF PUBLIC SERVICE OUTLETS, FISCAL YEAR 1998

Library - An entity that provides all of the following:

1. An organized collection of printed or other materials or a combination thereof;

2. A staff trained to provide and interpret such materials as required to meet the informational, cultural, recreational, or educational needs of clientele;

3. An established schedule in which services of the staff are available to clientele;

4. The physical facilities necessary to support such a collection, staff, and schedule.

This includes libraries that are part of learning resource centers.

Branch and independent libraries (line 01) — Report the number of branch and independent libraries at your institution that were open all or part of fiscal year 1998. EXCLUDE THE MAIN OR CENTRAL LIBRARY. Branch and independent libraries are defined as auxiliary library service outlets with quarters separate from the central library of an institution which have a basic collection of books and other materials, a regular staffing level, and an established schedule. Branch and independent libraries are administered **either** by the central library **or,** as in the case of some libraries (such as law, medical, etc.), through the administrative structure of other units within the university. Departmental study/reading rooms are not included. Include data for all branch and independent libraries on the campus. Include libraries on **branch campuses** (i.e., located in another community) if those campuses are registered under the same NCES UNITID number as the main campus.

PART B - LIBRARY STAFF, FALL 1998

Full-time equivalent (FTE) employees (lines 02-08) — Report the number of filled or temporarily vacant FTE positions during Fall 1998 paid from funds under library control. To compute FTEs of part-time employees and student assistants, take the TOTAL number of hours worked per week by part-time employees IN EACH CATEGORY and divide it by the number of hours CONSIDERED BY THE REPORTING LIBRARY TO BE A FULL-TIME WORK WEEK (e.g., 60 hours per week of part-time work divided by 40 hours per full-time week equals 1.50 FTE). Data should be reported to two decimal places.

Librarians (line 02) — Report the total FTE of staff whose duties require professional education (the master's degree or its equivalent) in the theoretical and scientific aspects of librarianship.

Other professional staff (line 03) — Report the total FTE of staff whose duties require education and/or training in related fields (e.g., academic disciplines, archives, media, computing).

Total librarians and other professional staff (line 04) — Report the sum of lines 02 and 03.

All other paid staff (except student assistants) (line 05) — Report the total FTE of all other library staff who are paid annual salaries or hourly wages except students, who are reported on line 05. Include technical and clerical staff, but exclude maintenance and custodial staff.

Contributed services staff (line 06) — Report the total FTE for contributed services staff. Contributed services staff are those, such as members of religious orders, whose services are valued by bookkeeping entries rather than by full cash transactions. Do **not** include volunteers.

Student assistants from all funding sources (line 07) — Report the total FTE of student assistants, employed on an hourly basis whose wages are paid from funds under library control or from a budget other than the library budget, including College Work Study Program. Exclude maintenance and custodial staff.

Total FTE staff (line 08) — Report the sum of lines 04 through 07.

PART C - LIBRARY EXPENDITURES, FISCAL YEAR 1998

Expenditures (lines 09-25) — Report funds expended by the library in fiscal year 1998 (regardless of when received) from its regular budget and from all other sources; e.g., research grants, special projects, gifts and endowments, and fees for services. If items in this section are not paid from the library budget but can be easily identified in other parts of the institution's budget, report them here. Expenditures should be reported for the 12-month period which corresponds to your library's fiscal year between the calendar period June 1, 1997, to September 30, 1998. All expenditures should be reported in whole dollars in the most

appropriate category to provide an unduplicated count of expenditures. Exclude expenditures for new buildings and building renovation. DO NOT REPORT ANY EXPENDITURES MORE THAN ONCE.

Salaries and wages (lines 09-11) — Report expenditures for full-time and part-time salaries and wages before deductions. Exclude employee fringe benefits provided by your institution for all regular library staff which may be reported on line 25. Include salaries and wages from all sources paid to students serving on an hourly basis, if available; e.g., College Work Study Program. Exclude contributed services and maintenance and custodial staff.

Information resources (lines 12-19):

Books, serial backfiles, and other materials (lines 12 and 13) — Report expenditures for all published materials. Do not include serials.

Paper (line 12) — Report expenditures for all materials produced by making an impression with ink on paper.

Microform (line 12) — Report expenditures for all photographic reproductions of textual, tabular, or graphic materials reduced in size so that they can be used only with magnification. Examples of microforms are roll microfilm, microcard, microfiche, and ultrafiche.

Electronic (line 13) — Report expenditures for materials that are considered part of the collection, whether purchased or leased, such as CD-ROMs, magnetic tapes, and magnetic disks, that are designed to be processed by a computer or similar machine. Include material available remotely. Include expenditures for materials purchased jointly if such expenditures can be separated from other charges for joint services. Include expenditures for equipment when the cost is inseparably bundled into the price of the information service product. Exclude expenses for library system software and microcomputer software used only by the library staff which are reported on line 21.

Current serial subscriptions and search services (lines 14 and 15) — Report expenditures for current subscriptions to serials. These are publications issued in successive parts, usually at regular intervals, and, as a rule, intended to be continued indefinitely. Serials include periodicals, newspapers, annuals (reports, yearbooks, etc.), memoirs, proceedings, and transactions of societies. Include leases to collections of electronic serials. Include cost of search services such as First Search or Dialog.

Paper (line 14) — Report expenditures for all materials produced by making an impression with ink on paper.

Microform (line 14) — Report expenditures for all photographic reproductions of textual, tabular, or graphic materials reduced in size so that they can be used only with magnification. Examples of microforms are roll microfilm, microcard, microfiche, and ultrafiche.

Electronic (line 15) — Report expenditures for materials that are not current serials and are considered part of the collection, whether purchased or leased, such as CD-ROMs, magnetic tapes, and magnetic disks, that are designed to be processed by a computer or similar machine. Include material available remotely. Include expenditures for materials purchased jointly if such expenditures can be separated from other charges for joint services. Include expenditures for equipment when the cost is inseparably bundled into the price of the information service product. Exclude expenses for library system software and microcomputer software used only by the library staff which are reported on line 21.

Audiovisual materials (line 16) — Report expenditures for all library materials that are displayed by visual projection or magnification or through sound reproduction, or both, including graphic materials, audio materials, motion pictures, video materials, and special visual materials such as three-dimensional materials.

Document delivery/interlibrary loan (line 17) — Report expenditures for document delivery and interlibrary loan services. Include fees paid for photocopies, costs of facsimile transmission, royalties and access fees paid to provide document delivery or interlibrary loan. Include fees paid to bibliographic utilities if the portion paid for interlibrary loan can be separately counted. Do not count expenditures related to transactions between the main or central library and any libraries reported in Part A, transactions between libraries reported in Part A, or expenditures for on campus delivery.

Preservation (line 18) — Report expenditures associated with maintaining library and archival materials for use either in their original physical form or in some other usable way. This includes but is not limited to binding and rebinding, materials conservation, deacidification, lamination, and restoration. Do not include staff salaries and wages.

Other materials (line 19) — Report any other collection expenditures not already included on lines 12 through 18, such as expenditures for cartographic materials and manuscripts.

Operating Expenditures (lines 20-23)

Furniture and equipment (line 20) — Report expenditures for all library furniture and equipment purchased during the 1998 fiscal year. Include microform equipment, audiovisual equipment, and related maintenance costs. Exclude computer equipment.

Computer hardware and software (line 21) — Report expenditures from the library budget for computer hardware and software used to support library operations, whether purchased or leased, mainframe or microcomputer. Include expenditures for maintenance. Include the expenditure for equipment used to run information service products when that expenditure can be separated from the price of the product. Exclude expenditures reported on line 15.

Bibliographic utilities, networks, and consortia (line 22) — Report expenditures for services provided by national, regional, and local bibliographic utilities, networks, and consortia. Exclude expenditures already reported on lines 15 and 17.

All other operating expenditures (line 23) — Report all other expenditures not already reported on lines 09 through 22 except employee fringe benefits which are reported on line 25. Exclude expenditures for new buildings and building renovations.

Total (line 24) — Report the sum of lines 09 through 23.

Employee fringe benefits (line 25) — If benefits are paid from the library budget, report the amount here.

PART D - LIBRARY COLLECTIONS, FISCAL YEAR 1998

NOTE - This section of the survey collects data on selected types of material. It does not cover all materials.

Column (1), Total number added during fiscal year — Report the gross number of each category added. Do not subtract the number withdrawn.

Column (2), Total number held at end of fiscal year — Report the total number of each category held at end of fiscal year. To get this figure, take the total number held at the end of the previous fiscal year, add the number added during the fiscal year just ended and subtract the number withdrawn during that period.

Units (lines 28 and 32) — An individual physical item of library material. Examples of units are: a volume (books and serials); a reel, sheet, or card (microforms); disk, cassette, reel, slide, chart, picture, tape, or cartridge (audiovisual material).

Volumes (line 26) — Report the number of volumes of any printed, mimeographed, or processed work contained in one binding or portfolio, hardbound or paper bound, which has been cataloged, classified, or otherwise made ready for use. Include any government documents that are accessible through the library's catalog regardless of whether or not they are separately shelved. This includes documents for which records are provided by the library or downloaded from other sources into the library catalog.

Titles (lines 27 and 29) — Report the number of titles of publications which form a separate bibliographic whole, whether issued in one or several volumes, reels, disks, slides, or parts. The term "publication" applies to printed materials, such as books, periodicals, and government documents, as well as to such formats as microforms, audiovisual materials, and computer files. To determine the number of titles, count each unique bibliographic record in the library's catalog.

NOTE -. For libraries which have card catalogs, a unique bibliographic record is represented by a shelf list entry. Libraries with electronic catalogs should be careful to distinguish between the BIBLIOGRAPHIC record which describes the title and the ITEM records which describe the individual volumes, parts, reels, disks, etc., associated with the title. Examples: Six copies of the same edition of a title count as one title or bibliographic record; two editions of the same title which have been cataloged or recorded separately count as two bibliographic records; a set of six monographs for which there are six bibliographic records counts as six titles; and two multi-volume sets of the same edition for which one bibliographic record has been made count as one title.

Books, serial backfiles, and other materials (include government documents (lines 26-29) — Report the number of paper volumes and/or titles; microform units and electronic media titles.

Paper (line 26 and 27) — Materials produced by making an impression with ink on paper. For government documents, please use the following guides from the *ARL Statistics*: "if a volume count has not been kept, it may be estimated through sampling a representative group of title records and determining the corresponding number of volumes, then extrapolating to the rest of the collection. As an alternative, an estimate may be made using the following formulae: 52 document pieces per foot: 10 'traditional' volumes per foot; 5.2 document pieces per volume."

Microform (line 28) — Report the number of units of photographic reproductions of textual, tabular, or graphic materials reduced in size so that they can be used only with magnification. Examples of microforms are: roll microfilm, microcard, microfiche, and ultrafiche.

Electronic (line 29) — Report the number of titles of materials that are not current serials and are considered part of the collection, whether purchased or leased, such as CD-ROMS, magnetic tapes and magnetic disks, that are designed to be processed by a computer or similar machine. Include materials available remotely. Include materials purchased jointly. Exclude bibliographic records used to manage the collection, library system software, and microcomputer software used only by the library staff. Include government documents.

Current serial subscriptions (lines 30 and 31) — Report the total number of current serials received including those that are paid for and those received without payment. Include government documents issued serially. Each available title counts as one when titles are received as part of an electronic subscription.

Audiovisual materials (line 32) — All library materials that are displayed by visual projections of magnification or through sound reproduction, or both, including graphic materials, audio materials, motion pictures, video materials, and special visual materials such as three-dimensional materials.

PART E - LIBRARY SERVICES, FISCAL YEAR 1998

Document delivery/interlibrary loans (lines 33-38) — On lines 33, 34, and 35, report the number of filled requests for material provided to other libraries. On lines 36, 37, and 38, report the number of filled requests for material received from other libraries or document delivery services. Do not include transactions between the main or central library and any libraries reported in Part A or transactions between libraries reported in Part A.

Returnables (lines 33 and 36) — Report materials that the supplier/lending library expects to have returned. Examples of returnables include books, dissertations and theses, microfilm reels, sound recordings, and audiovisual material.

Nonreturnables (lines 34 and 37) — Report materials that the supplier/lending library does not expect to have returned. Examples of nonreturnables include photocopies or facsimiles, fiche-to-fiche copies, print copies from microfilm, electronic full-text documents, and gratis print copies of unpublished reports and/or departmental working papers.

Total loans (lines 35 and 38) — Sum lines 33 and 34 for line 35, and sum lines 36 and 37 for line 38.

Circulation transactions (lines 39 and 40) — Report the number of items lent from the general collection on line 39 and from the reserve collection on line 40 for use usually (although not always) outside the library. These activities include initial charges, either manual or electronic, and also renewals, each of which is reported as a circulation transaction.

General collection (line 39) — Those materials that are available for circulation from the general library collection.

Reserve collection (line 40) — Those materials that have been removed from the general library collection and set aside in a library so they will be on hand for a certain course of study or activity in process. Usually, the circulation and length of loan of items in a reserve collection are

restricted so that these items will be available to many users who have need of them within a limited time period.

Information services to groups (lines 41 and 42) — Report the total number of presentations (line 41) and the total number of persons attending or served by those presentations (line 42). Information services to groups are presentations at which a staff member or person invited by a staff member provides information intended for a number of persons and planned in advance. These services may be either bibliographic instruction or library use presentations, or cultural, recreational, or educational presentations. Presentations both on and off the library premises should be included, as long as they are sponsored by the library. Do not include meetings sponsored by other groups using library meeting rooms.

PART F - LIBRARY SERVICES - TYPICAL WEEK, FALL 1998

Collect data during a typical week in the fall. A typical week is one that is neither unusually busy nor unusually slow. Avoid vacation periods for key staff or days when unusual events are taking place on the campus or in the library. Choose a week in which the library is open its regular hours. Include any seven consecutive calendar days. If waiting for a typical week in Fall 1998 will delay this form, please use typical week data from the preceding fiscal year. If you have data for the entire year, divide by the number of weeks that the library was open.

Hours open in a typical week (line 43) — Report an unduplicated count of hours open in a typical week for both main library and branches reported in Part A using the following method. If a library is open from 9 a.m. to 5 p.m., Monday through Friday, it should report 40 hours per week. If several of its branches are also open during those hours, the figure remains 40 hours per week. Should Branch A also be open one evening from 7:00 to 9:00, the total hours during which users can find service becomes 42. If Branch B is open the same hours on the same evening, the total remains 42, but if it is open two hours on another evening, or from 5:00 to 7:00 on the evening when Branch A is open later, the total becomes 44 hours during which users can find service.

Gate count in a typical week (line 44) — Report the number of persons who physically enter library facilities in a typical week. It is understood that a single person may be counted more than once.

Reference transactions in a typical week (line 45) — Report the total number of reference transactions in a typical week. A reference transaction is an information contact that involves the knowledge, use, commendation, interpretation, or instruction in the use of one or more information sources by a member of the library staff. Information sources include printed and non printed materials, machine-readable databases (including assistance with computer searching), catalogs and other holdings records, and, through communication or referral, other libraries and institutions, and persons both inside and outside the library. Include information and referral services. If a contact includes both reference and directional services, it should be reported as one reference transaction. When a staff member utilizes information gained from a previous use of information sources to answer a question, report as a reference transaction, even if the source is not consulted again during this transaction. Duration should not be an element in determining whether a transaction is a reference transaction.

Do not report directional transactions here. A directional transaction is an information contact which facilitates the use of the library in which the contact occurs and which does NOT involve the knowledge, use, recommendation, interpretation, or instruction in the use of any information sources other than those which describe the library; such as schedules, floor plans, handbooks, and policy statements. Examples of directional transactions include giving instruction in locating, within the library, staff, library users, or physical features, etc., and giving assistance of a nonbibliographic nature with machines.

PART G - ELECTRONIC SERVICES

This section requests information about the availability of electronic services in the library and elsewhere on campus and off campus access by your primary clientele, and other users. The questions require a "yes" or "no" response to the availability of the various services listed.

FORM **IPEDS-CN**
(7-1-98)

OMB No. 1850-0582: Approval Expires 06/30/2001

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
ACTING AS COLLECTING AGENT FOR THE
U.S. DEPARTMENT OF EDUCATION
NATIONAL CENTER FOR EDUCATION STATISTICS

NOTE – The completion of this survey, in a timely and accurate manner, is **MANDATORY** for all institutions which participate or are applicants for participation in any Federal financial assistance program authorized by Title IV of the Higher Education Act of 1965, as amended. The completion of this survey is mandated by 20 U.S.C. 1094(a)(17).

The collection and reporting of racial/ethnic data on this survey are **MANDATORY** for all institutions which receive, are applicants for, or expect to be applicants for Federal financial assistance as defined in the Department of Education (ED) regulations implementing Title VI of the Civil Rights Act of 1964 (34 CFR 100.13), or defined in any ED regulations implementing Title IX of the Education Amendments of 1972. The collection of racial/ethnic data in vocational programs is mandated by Section 421(a)(1) of the Carl D. Perkins Vocational Education Act.

For those institutions not required to complete this survey on the basis of the above requirements, the completion of this survey is voluntary and authorized by P.L. 103-382, National Education Statistics Act of 1994, Sec. 404(a).

INTEGRATED POSTSECONDARY EDUCATION DATA SYSTEM

CONSOLIDATED SURVEY

1998

***Please read** the accompanying instructions before completing this survey form. Report data ONLY for the institution in the address label. If data for any other institutions or branch campuses are included in this report because they CANNOT be reported separately, please provide a list of these schools.*

Please correct any errors in the name, address, and ZIP Code.

RETURN TO:

If there are any questions about this form, contact a Bureau of the Census IPEDS representative at (800) 451-6236 or FAX number (301) 457-1542, 7:30 a.m.—4:30 p.m. EST.

Date due: November 15, 1998

1. Name of respondent	**2.** Title of respondent	**3.** Telephone Area code, number, extension
4. E-Mail address		FAX number

PURPOSE OF THE SURVEY

This survey collects data on fall enrollment, completions, enrollment in occupationally specific programs, staff, and libraries. These data allow the National Center for Education Statistics to describe the size of one of the Nation's largest enterprises — postsecondary education — in terms of students enrolled, degrees and other awards earned, and staff employed.

USES OF DATA

The National Center for Education Statistics (NCES) uses these data to meet its Congressional mandate to report on the condition of education in the Nation. These data are used to update the Digest of Education Statistics and the Condition of Education, two annual reports produced by NCES. The Department of Education uses these data for policy analysis and program evaluation; and the Bureau of Labor Statistics uses completions data in its manpower analysis reported in the Occupational Outlook Handbook. Survey respondents can use the published results to compare their operations with national averages to spot trends in program offerings, enrollments, staffing patterns, and key statistics.

CERTIFICATION – I certify that the information given in this report is correct and true to the best of my knowledge and was prepared in accordance with accompanying instructions. Willfully false statements on this report are punishable by law, U.S. Code, Title 18, Section 1001.

4. Name *(Type or print)*	**5.** Title	**6.** Telephone *(Area code, number, ext.)*
7. Signature		**8.** Date

Changes from the 1997 form for

1998 CONSOLIDATED SURVEY

The 1998 survey includes:

- **Part A — Fall Enrollment**
- **Part B — Postsecondary Completions**
- **Part F — Library**

The finance data are collected on a separate form (CN-F) in 1998.

- **Parts C and E are not requested this year.**

COMPLIANCE REQUIREMENTS

The Office for Civil Rights (OCR) and the National Center for Education Statistics (NCES), with the approval of the Office of Management and Budget, cooperate in the collection of racial/ethnic information from all postsecondary institutions for the enrollment and completions sections of this survey. Section 100.6(b) of the regulations implementing Title VI of the Civil Rights Act of 1964, set forth below, and similar provisions of the Title VI regulations of other Federal agencies, authorize collection of this information.

> 100.6(b) **Compliance Reports -** Each recipient shall keep records and submit to the responsible Department official or his designee timely, complete and accurate compliance reports at such times and in such form and containing such information as the responsible Department official or his designee may determine to be necessary to enable him to ascertain whether the recipient has complied or is complying with this part. For example, recipients should have available for the Department racial and ethnic data showing the extent to which members of minority groups are beneficiaries of and participants in federally-assisted programs. In the case of any program under which a primary recipient extends Federal financial assistance to any other recipient, such other recipient shall also submit such compliance reports to the primary recipient as may be necessary to enable the primary recipient to carry out its obligations under this part.

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 1850-0582. The time required to complete this information collection is estimated to vary from 30 minutes to 5.0 hours per response, with an average of 2.5 hours, including the time to review instructions, search existing data resources, gather and maintain the data needed, and complete and review the information collection. **If you have any comments concerning the accuracy of the time estimate(s) or suggestions for improving this form, please write to:** U.S. Department of Education, Information Management Team, Washington, DC 20202-4652. **If you have any comments or concerns regarding the status of *your individual submission* of this form, write directly to:**

National Center for Education Statistics/IPEDS
U.S. Department of Education
555 New Jersey Avenue, NW
Washington, DC 20208-5652

The definitions and instructions for compiling IPEDS data have been designed to minimize comparability problems. However, postsecondary education institutions differ widely among themselves. As a result of these differences, comparisons of data provided by individual institutions may be misleading.

DO NOT RETURN INSTRUCTIONS

CN

NOTICE OF COMBINED DATA SUBMISSION FOR CONSOLIDATED SURVEY

Note that the preprinted information (if provided) indicates which data were reported as combined last year.
Verify that the information is correct for the current year. Please make any corrections in RED.

The institution named on this report is including data for other institutions/branches.

☐ No
☐ Yes — *Please indicate below, the Part(s) where you are reporting combined data and the UNITID (if known), name and address of the institutions for which data are included.*

Parts	UNITID	Institution name	Address	City	State	ZIP Code

The data for this institution are reported by another institution.

☐ No
☐ Yes — *Please indicate whether all data, or just certain parts, are being reported by another institution. Also list the UNITID, name, and address of the reporting institution.*

Parts	UNITID	Institution name	Address	City	State	ZIP Code

Part A — FALL ENROLLMENT SUMMARY BY RACIAL/ETHNIC CATEGORY

Enrollment as of the Institution's Official Fall Reporting Date or as of October 15, 1998

Report all students enrolled in courses creditable toward a degree, diploma, certificate, or other formal award. At the undergraduate level, this is intended to include students enrolled in courses that are part of vocational or occupational programs.

Line No.	99.0000 Summary All students enrolled for credit	Nonresident alien		Black, non-Hispanic		American Indian or Alaskan Native		Asian or Pacific Islander		Hispanic		White, non-Hispanic		Race/ethnicity unknown		GRAND TOTAL ALL STUDENTS	
		Men (1)	Women (2)	Men (3)	Women (4)	Men (5)	Women (6)	Men (7)	Women (8)	Men (9)	Women (10)	Men (11)	Women (12)	Men (13)	Women (14)	Men (15)	Women (16)
	FULL-TIME STUDENTS																
01	First-time																
03	All other																
	PART-TIME STUDENTS																
15	First-time																
17	All other																
29	**GRAND TOTAL**																

Part B — PRIOR YEAR POSTSECONDARY COMPLETIONS
AWARDS/DEGREES CONFERRED BETWEEN JULY 1, 1997 AND JUNE 30, 1998

AWARD LEVELS

1 Awards of less than 1 academic year below the bachelor's level *(less than 900 contact or clock hours)*

2 Awards of at least 1 but less than 2 academic years below the bachelor's level *(at least 900 but less than 1800 contact or clock hours)*

3 Associate's Degrees

4 Awards of at least 2 but less than 4 academic years below the bachelor's level *(at least 1800 but less than 3600 contact or clock hours)*

5 Bachelor's Degrees

6 Postbaccalaureate Certificates

7 Master's Degrees

8 Post-Master's Certificates

9 Doctor's Degrees

10 First-professional Degrees

11 First-professional Certificates (Post-Degree)

Please read the instructions for reporting Part B data before continuing. Verify the award level for each program listed below that was reported last year. Note that programs may be listed more than once with **different** award levels.

CIP codes and program titles	Award level	Nonresident alien		Black, non-Hispanic		American Indian or Alaskan Native		Asian or Pacific Islander		Hispanic		White, non-Hispanic		Race/ethnicity unknown		**GRAND TOTAL ALL STUDENTS**	
		Men (1)	Women (2)	Men (3)	Women (4)	Men (5)	Women (6)	Men (7)	Women (8)	Men (9)	Women (10)	Men (11)	Women (12)	Men (13)	Women (14)	Men (15)	Women (16)

Part B — PRIOR YEAR POSTSECONDARY COMPLETIONS
AWARDS/DEGREES CONFERRED BETWEEN JULY 1, 1997 AND JUNE 30, 1998 — Continued

CIP codes and program titles	Award level	Nonresident alien		Black, non-Hispanic		American Indian or Alaskan Native		Asian or Pacific Islander		Hispanic		White, non-Hispanic		Race/ethnicity unknown		GRAND TOTAL ALL STUDENTS	
		Men (1)	Women (2)	Men (3)	Women (4)	Men (5)	Women (6)	Men (7)	Women (8)	Men (9)	Women (10)	Men (11)	Women (12)	Men (13)	Women (14)	Men (15)	Women (16)

Part D — FINANCE

The finance data are collected on a separate form (CN-F) in 1998.

Part F — LIBRARIES
(Collected in even-numbered years only)

Does your institution have its own library?

1 ☐ Yes — *Continue with Part F*
2 ☐ No — *Do* ***not*** *complete Part F*

(Fiscal year must end before October 1, 1998)

Item	Number
1. Total FTE Staff (Fall 1998) — *Report data to two decimals*	
2. Total operating expenditures in whole dollars only (Fiscal year 1998)	$
3. Number of volumes held at end of year (Fiscal year 1998)	
4. Total circulation transactions (Fiscal year 1998)	

GENERAL INSTRUCTIONS — CN

Respond to each item on this report in the space provided; if a section does not apply to your institution, note "not applicable." The Glossary provides definitions of terms used in this report.

Part A — FALL ENROLLMENT SUMMARY

Enrollment should be reported as of the institution's official fall reporting date or October 15, 1998.

Students to be included — Report all students enrolled in courses creditable toward a degree, diploma, certificate, or other formal award, separating full-time and part-time students. (First-time students are those attending any institution for the first time; that is, the student enters the institution with NO CREDIT toward a degree or award).

Include students enrolled in courses that are part of a vocational or occupational program, INCLUDING those in off-campus centers.

Include high school students enrolled in postsecondary education courses creditable toward the completion of a program.

Students to be excluded — *Do NOT include* —

- Students enrolled exclusively in courses not creditable toward a formal award or completion of a vocational program;
- Students exclusively auditing classes;
- Students in any branch campus located in a foreign country; or
- Students earning continuing education units (CEU's).

Enrollment status — Once you have determined who to include in your report, identify the students as either "full-time" or "part-time" and as "first-time" or "all other". These categories correspond to the lines of the survey form on which the data are reported. Follow the instructions for reporting students by racial/ethnic category.

Part B — POSTSECONDARY COMPLETIONS

Report only those awards/degrees which were actually conferred between July 1, 1997 and June 30, 1998. Awards/degrees earned but not yet conferred during this time period should be reported in next year's survey. Part B applies to award levels ranging from postsecondary certificates of less than one year to doctorate level degrees. Include completions in academic as well as vocational or occupational programs.

Preprinted programs — The survey form lists those programs and their appropriate award levels that were reported by your institution last year. The award levels and their codes are noted at the top of Part B. Please **verify** these levels before completing this form. Note that a program and its 6-digit CIP code may be listed more than once if the program is offered at different award levels. If your institution no longer offers one or more of these programs, delete them from the list by drawing a line through the program title. For the remaining programs, follow the directions for reporting completions by racial/ethnic category.

Blank lines — The survey form includes a blank section so that you may report completions in programs that were not preprinted for you, including new programs. Refer to the 1990 version of the **Classification of Instructional Programs (CIP)** booklet to determine the appropriate program title that most closely matches your program and enter the CIP title and its 6-digit code in the space provided. Choose one of the 11 levels of awards listed at the top of the page, and enter the correct code for each newly listed program in the Award Level column following the CIP code or program title. Enter the completions data for the newly listed programs.

Part C — FALL ENROLLMENT IN OCCUPATIONALLY SPECIFIC PROGRAMS (Collected in odd-numbered years only)

Enrollment should be reported as of the institution's official fall reporting date or October 15, 1999.

Applicability of report — This enrollment section is requested only from institutions that offer occupationally specific programs below the bachelor's level which require less than 4 years to complete. Occupationally specific programs are listed in chapter 2 of the enclosed 1990 version of the **Classification of Instructional Programs (CIP)** booklet. Refer to the CIP booklet to determine whether your institution offers any of the applicable programs. If Part B data for any of these programs are reported below the bachelor's level, then enrollment for that program should be reported here.

Students to be included — Report only those students enrolled in programs below the baccalaureate level that are specifically designed to provide occupational preparation. Students in a program are either — **(1)** those who have formally declared their program intent; or **(2)** those who have completed at least 25% of a program's requirements. The program may result in a degree, certificate, or other formal award granted by the institution.

Include high school students in these programs if they are working toward the completion of a program.

Report TOTAL enrollment in each program; combine full- and part-time headcounts. If a student is enrolled in more than one program (with **different** CIP's), report the student in **each** program.

Program enrollment — Part C lists those occupationally specific programs known to exist at your institution. Please complete Part C of the survey in the same manner as Part B, deleting programs that are no longer offered at your institution and adding new ones in the blank area. Refer to the CIP booklet as needed to code new programs or to verify those that already exist. Follow the instructions for reporting students by racial/ethnic category.

Sum the enrollment reported for each program by column and enter the totals on line 99.0000.

Checking — Verify all additions before returning this form. Total entries are always computed by adding down columns and across rows. Be sure that for each row, the sum of columns 1, 3, 5, 7, 9, 11, and 13 is equal to column 15, and the sum of columns 2, 4, 6, 8, 10, 12, and 14 is equal to column 16.

Unduplicated count — Please provide an unduplicated count of all students enrolled in occupationally specific programs. If a student is enrolled in more than one program, count the student **once** when reporting this number.

REMOVE INSTRUCTIONS BEFORE MAILING AND RETAIN FOR YOUR FILES.

BEST COPY AVAILABLE

REPORTING STUDENTS BY RACIAL/ETHNIC CATEGORY AND SEX — PARTS A, B, AND C

This information is being gathered in compliance with Title VI of the Civil Rights Act of 1964 and Title IX of the Education Amendments of 1972 (see Compliance Requirements, page 2), and Section 421(a)(1) of the Carl D. Perkins Vocational Education Act.

Method of collection — The manner of collecting racial/ethnic information is left to the discretion of the institution provided that the system which is established results in reasonably accurate data, which may be replicated by others when the same documented system is utilized. One acceptable method is a properly controlled system of post-enrollment self-identification by students. If a self-identification method is utilized, a verification procedure to ascertain the completeness and accuracy of student submissions should be employed.

Assignment to categories — For the purpose of this report, a student may be included in the group to which he or she appears to belong, identifies with, or is regarded in the community as belonging. However, no person may be counted in more than one racial/ethnic category. Racial/ethnic designations are requested only for United States citizens, resident aliens, and other eligible non-citizens. *(See definitions below.)*

Racial/ethnic descriptions — Racial/ethnic designations as used in this survey do not denote scientific definitions of anthropological origins. The categories are —

- **Black, non-Hispanic** — A person having origins in any of the black racial groups of Africa (except those of Hispanic origin).
- **American Indian or Alaskan Native** — A person having origins in any of the original peoples of North America and who maintains cultural identification through tribal affiliation or community recognition.
- **Asian or Pacific Islander** — A person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or Pacific Islands. This includes people from China, Japan, Korea, the Philippine Islands, American Samoa, India, and Vietnam.
- **Hispanic** — A person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.
- **White, non-Hispanic** — A person having origins in any of the original peoples of Europe, North Africa, or the Middle East (except those of Hispanic origin).

Other descriptive categories

- **Nonresident alien** — A person who is not a citizen or national of the United States and who is in this country on a visa or temporary basis and does not have the right to remain indefinitely.

  Note — Nonresident aliens are to be reported separately, in the columns provided, rather than included in any of the five racial/ethnic categories described above. **Resident aliens** and other eligible (for financial aid purposes) non-citizens who are not citizens or nationals of the United States and who have been admitted as legal immigrants for the purpose of obtaining permanent resident alien status (and who hold either an alien registration card (Form I-551 or I-151), a Temporary Resident Card (Form I-688), or an Arrival-Departure Record (Form I-94) with a notation that conveys legal immigrant status such as Section 207 Refugee, Section 208 Asylee, Conditional Entrant Parolee or Cuban-Haitian) are to be reported in the appropriate racial/ethnic categories along with United States citizens.

- **Race/ethnicity unknown** — This category is used ONLY if the student did not select a racial/ethnic designation, AND the postsecondary institution finds it impossible to place the student in one of the aforementioned racial/ethnic categories during established enrollment procedures or in any post-enrollment identification or verification process.

In columns 15 and 16, report the grand total of all students or award recipients regardless of race/ethnicity or citizenship.

Part D — FINANCE

The finance data are collected on a separate form (CN-F) in 1998.

Part E — STAFF (Collected in odd-numbered years only)

All persons on the payroll of the institution as of November 1, 1999 are to be included in this part.

Status of employees — Report in columns 1-4 men and women by their full-time/part-time status as of November 1, 1999. This status is to be determined by the institution.

Primary occupational activity — Each employee must be accounted for in one AND ONLY ONE of the occupational activity categories, lines 1-8. If an employee is engaged in two or more separate activities, the employee should be reported according to their primary activity. The institution should determine what constitutes the primary activity.

Special instructions — Employees at off-campus locations associated with the campus covered by this report should also be reported.

Hospitals, medical centers, and other institutions which offer postsecondary education programs as only one of their primary missions should ONLY report staff who work either full-time or part-time in the postsecondary education division or component of the institution. **Note** — If an employee works full-time for the institution but only part-time in the postsecondary education division or component — for purposes of this survey, that employee should be reported as part-time in their primary occupational activity in the postsecondary education division or component.

Part F — LIBRARIES (Collected in even-numbered years only)

If your institution has its own library, please complete the information requested using the following guidelines:

Period of report — Report data for your library for the most recent fiscal year that ended prior to October 1, 1998. The particular 12-month period should be the same used for reporting Consolidated — Finance data.

Total full-time-equivalent (FTE) employees — Report the sum of the number of full-time employees plus the full-time-equivalent of the part-time employees. To compute full-time-equivalents of part- time employees, take the number of hours worked by all part-time employees and divide it by the number of hours CONSIDERED BY THE REPORTING LIBRARY TO BE A FULL-TIME WORK WEEK (e.g., 60 hours per week of part-time work divided by 40 hours per full-time week equals 1.50 FTE). Include librarians, other paid staff, contributed services staff, and student assistants (from all funding sources). Exclude maintenance and custodial staff. Report data to two decimal places.

Part F — LIBRARIES (Collected in even-numbered years only) — Continued

Total operating expenditures — Report the funds expended from the LIBRARY BUDGET in fiscal year 1998 regardless of when the funds may have been received from federal, state, or other sources. All expenditures should be reported in whole dollars. Include salaries and wages, print materials, current serial subscriptions, microforms, machine readable materials, audiovisual materials, other collection expenditures, preservation, furniture and equipment, computer hardware, postage, telecommunications, on-line database searches, contracted computer services, and all other operating expenditures. Exclude salaries and wages for contributed services and maintenance and custodial staff, and expenditures for capital outlays.

Volumes held at end of fiscal year — Report the number of volumes of any printed, typewritten, handwritten, mimeographed, or processed work contained in one binding or portfolio, hardbound or paperbound, which has been catalogued, classified, or otherwise made ready for use.

Circulation transactions — Report the number of items lent from the general collection and from the reserve collection for use usually (although not always) outside the library. These activities include initial charges, either manually or electronically, and also renewals, each of which is reported as a circulation transaction.

GLOSSARY
CONSOLIDATED SURVEY — CN

ALL OTHER STUDENTS — Includes all other students except first-time students. (Part A)

AMERICAN INDIAN OR ALASKAN NATIVE — A person having origins in any of the original peoples of North America and who maintains cultural identification through tribal affiliation or community recognition. (Parts A, B, and C)

ASIAN OR PACIFIC ISLANDER — A person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or Pacific Islands. This includes people from China, Japan, Korea, the Philippine Islands, American Samoa, India, and Vietnam. (Parts A, B, and C)

ASSOCIATE'S DEGREE — An award that normally requires at least 2 but less than 4 years of full-time equivalent college work. (Part B)

BACHELOR'S DEGREE — An award (baccalaureate or equivalent degree, as determined by the Secretary, U.S. Department of Education) that normally requires at least 4 but NOT more than 5 years of full-time equivalent college-level work. This includes ALL bachelor's degrees conferred in a 5-year COOPERATIVE (WORK-STUDY PLAN) PROGRAM. A cooperative plan provides for alternate class attendance and employment in business, industry, or government; thus, it allows students to combine actual work experience with their college studies. Also includes bachelor's degrees in which the normal 4 years of work are completed in 3 years. (Part B)

BLACK, NON-HISPANIC — A person having origins in any of the black racial groups of Africa (except those of Hispanic origin). (Parts A, B, and C)

CASUAL EMPLOYEES — Persons who are hired to work during peak times such as those that help at registration time or those that work in the bookstore for a day or two at the start of a session. (Part E)

CERTIFICATE — A formal award certifying the satisfactory completion of a postsecondary education program. (Part B)

CEU (CONTINUING EDUCATION UNIT) — One continuing education unit is normally defined as 10 contact hours of participation in an organized continuing education experience under responsible sponsorship, capable direction, and qualified instruction. (Part A)

CIP (CLASSIFICATION OF INSTRUCTIONAL PROGRAMS) — An NCES publication that provides a numerical classification and standard terminology for secondary and postsecondary instructional programs. (Parts B and C)

CIP CODE — A six-digit code in the form xx.xxxx that identifies instructional program specialties within educational institutions. (Parts B and C)

CIRCULATION TRANSACTIONS — The number of items lent from the general collection and from the reserve collection for use usually (although not always) outside the library. Includes activities with initial charges, either manual or electronic, and also renewals, each of which is reported as a circulation transaction. (Part F)

CLERICAL AND SECRETARIAL STAFF — Persons whose assignments typically are associated with clerical activities or are specifically of a secretarial nature. Includes personnel who are responsible for internal and external communications, recording and retrieval of data (other than computer programmers) and/or information and other paperwork required in an office, such as bookkeepers, stenographers, clerk-typists, office-machine operators, statistical clerks, and payroll clerks. Also includes sales clerks such as those employed full time in the book store, and library clerks who are not recognized as librarians. (Part E)

CONTACT HOUR — A unit of measure that represents an hour of scheduled instruction given to students. Also referred to as clock hour. (Part B)

CONTRACTED SERVICES — Services obtained through contracts with outside agencies which would normally be provided by paid employees. (Part E)

CREDIT — Recognition of attendance or performance in an instructional activity (course or program) that can be applied by a recipient toward the requirements for a degree, diploma, certificate, or other formal award. (Part A)

CREDIT COURSE — A course that, if successfully completed, can be applied toward the number of courses required for achieving a degree, diploma, certificate, or other formal award. (Part A)

GLOSSARY
CONSOLIDATED SURVEY — CN

DEGREE — An award conferred by a college, university, or other postsecondary education institution as official recognition for the successful completion of a program of studies. (Part B)

DIPLOMA — A formal document certifying the successful completion of a prescribed program of studies. (Part B)

DOCTOR'S DEGREE — The highest award a student can earn for graduate study. The doctor's degree classification includes such degrees as Doctor of Education, Doctor of Juridical Science, Doctor of Public Health, and the Doctor of Philosophy degree in any field such as agronomy, food technology, education, engineering, public administration, ophthalmology, or radiology. For the Doctor of Public Health degree, the prior degree is generally earned in the closely related professional field of medicine or in sanitary engineering. (Part B)

DONATED (CONTRIBUTED) SERVICES — Services provided by volunteers, members of religious orders, or by the Central or System office of an institution for which there is no charge to the campus but that would otherwise be provided by employees paid by the campus. (Part E)

EXECUTIVE, ADMINISTRATIVE, AND MANAGERIAL — Persons whose assignments require primary (and major) responsibility for management of the institution, or a customarily recognized department or subdivision thereof. Assignments require the performance of work directly related to management policies or general business operations of the institution, department, or subdivision. It is assumed that assignments in this category customarily and regularly require the incumbent to exercise discretion and independent judgment, and to direct the work of others. Included in this category are all officers holding titles such as president, vice president, dean, director, or the equivalent, as well as officers subordinate to any of these administrators with such titles as associate dean, assistant dean, executive officer of academic departments (department heads, or the equivalent) if their principal activity is administrative. (**Note** — Includes supervisors of professional employees, while supervisors of nonprofessional employees (technical, clerical, craft, and service/maintenance force) are to be reported within the specific categories of the personnel they supervise.) (Part E)

FACULTY (INSTRUCTION/RESEARCH/PUBLIC SERVICE) — Persons whose specific assignments customarily are made for the purpose of conducting instruction, research, or public service as a principal activity (or activities), and who hold academic-rank titles of professor, associate professor, assistant professor, instructor, lecturer, or the equivalent of any of these academic ranks. If their principal activity is instructional, this category includes deans, directors, or the equivalent, as well as associate deans, assistant deans, and executive officers of academic departments (chairpersons, heads, or the equivalent). Student teachers or research assistants are not included in this category. (Part E)

FIRST-PROFESSIONAL CERTIFICATE (POST-DEGREE) — An award that requires completion of an organized program of study designed for persons who have completed the first-professional degree. Examples could be refresher courses or additional units of study in a specialty or subspecialty. (Part B)

FIRST-PROFESSIONAL DEGREE — An award that requires completion of a program that meets all of the following criteria: **(1)** completion of the academic requirements to begin practice in the profession; **(2)** at least 2 years of college work prior to entering the program; and **(3)** a total of at least 6 academic years of college work to complete the degree program, including prior required college work plus the length of the professional program itself. First-professional degrees may be awarded in the following 10 fields:

- Chiropractic (D.C. or D.C.M.)
- Pharmacy (Pharm.D.)
- Dentistry (D.D.S. or D.M.D.)
- Podiatry (D.P.M., D.P., Pod.D.)
- Medicine (M.D.)
- Veterinary Medicine (D.V.M.)
- Optometry (O.D.)
- Law (L.L.B., J.D.)
- Osteopathic Medicine (D.O.)
- Theology (M.Div., M.H.L., B.D., or Ordination)

(Part B)

FIRST-TIME STUDENT — A student attending any institution for the first time at the level enrolled. Includes students enrolled in the fall term who attended a postsecondary institution for the first time at the same level in the prior summer term. Also includes students who entered with advanced standing (college credit earned before graduation from high school). (Part A)

FULL-TIME STAFF — Persons on the payroll of the institution (or reporting unit) and classified by the institution as full time. Includes faculty on sabbatical leave and persons who are on leave but remain on the payroll. (Part E)

FULL-TIME STUDENT —

- **Undergraduate** — A student enrolled for 12 or more semester credits, or 12 or more quarter credits, or 24 contact hours a week each term. (Part A)
- **Graduate** — A student enrolled for 9 or more semester credits, or 9 or more quarter credits or students involved in thesis or dissertation preparation that are considered full time by the institution.
- **First-Professional** — As defined by the institution. (Part A)

HISPANIC — A person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race. (Parts A, B, and C)

INSTRUCTION/RESEARCH ASSISTANTS — Students employed on a part-time basis for the primary purpose of assisting in classroom or laboratory instruction or in the conduct of research. These positions are typically held by graduate students having titles such as teaching assistant, teaching associate, teaching fellow, or research assistant. Students in the College Work-Study Program are not included in this category. Employees hired on a full-time basis (not students) are to be reported as other professionals. (Part E)

LIBRARY — An organized collection of printed, microform, and audiovisual materials which **(a)** is administered as one or more units, **(b)** is located in one or more designated places, and **(c)** makes printed, microform, and audiovisual materials as well as necessary equipment and services of a staff accessible to students and to faculty. Includes units meeting the above definition which are part of a learning resource center. (Part F)

LIBRARY OPERATING EXPENDITURES — The funds expended from the library budget regardless of when the funds may have been received from Federal, State, or other sources. Includes salaries and wages, print materials, current serial subscriptions, microforms, machine-readable materials, audiovisual materials, other collection expenditures, preservation, furniture and equipment, computer hardware, postage, telecommunications, on-line database searches, contracted computer services, and all other operating expenditures. Excludes salaries and wages for maintenance and custodial staff, microcomputer software used only by library staff, and expenditures for capital outlays. (Part F)

MASTER'S DEGREE — An award that requires the successful completion of a program of study of at least the full-time equivalent of 1 but not more than 2 academic years of work beyond the bachelor's degree. (Part B)

NONCREDIT COURSE — A course or activity having no credit applicable toward a degree, diploma, certificate, or other formal award. (Part A)

NONRESIDENT ALIEN — A person who is not a citizen or national of the United States and who is in this country on a visa or temporary basis and does not have the right to remain indefinitely. (Parts A, B, and C)

OCCUPATIONALLY SPECIFIC PROGRAM — An instructional program, below the bachelor's level, designed to prepare individuals with entry-level skills and training required for employment in a specific trade, occupation, or profession related to the field of study. (Part C)

OFF-CAMPUS CENTERS (EXTENSION CENTERS) — Sites outside the confines of the parent institution where courses are offered that are part of an organized program at the parent institution. The sites are not considered to be temporary but may be rented or made available to the institution at no cost by another institution or an organization, agency, or firm.

OFFICIAL FALL REPORTING DATE — The date (in the fall) on which an institution must report fall enrollment data to either the State, its board of trustees or governing board, or some other external governing body. (Parts A and C)

OTHER PROFESSIONALS (SUPPORT/ SERVICE) — Persons employed for the primary purpose of performing academic support, student services, and institutional support activities, whose assignments would require either college graduation or experience of such kind and amount as to provide a comparable background. Includes employees such as librarians, accountants, student personnel workers, counselors, systems analysts, computer programmers, and coaches. (Part E)

PART-TIME STAFF (EMPLOYEES) — Persons on the payroll of the institution (or reporting unit) and classified by the institution as part time. Students in the College Work-Study Program or casual employees (e.g., persons who are hired to help at registration time or to work in the bookstore for a day or two at the start of a session) are not considered part-time staff. (Part E)

PART-TIME STUDENT

- **Undergraduate** — A student enrolled for either 11 semester credits or less, or 11 quarter credits or less, or less than 24 contact hours a week each term. (Part A)
- **Graduate** — A student enrolled for either 8 semester credits or less, or 8 quarter credits or less. (Part A)

POSTBACCALAUREATE CERTIFICATE — An award that requires completion of an organized program of study requiring 18 credit hours beyond the bachelor's; designed for persons who have completed a baccalaureate degree, but do not meet the requirements of academic degrees carrying the title of master. (Part B)

POST-MASTER'S CERTIFICATE — An award that requires completion of an organized program of study of 24 credit hours beyond the master's degree, but does not meet the requirements of academic degrees at the doctor's level. (Part B)

POSTSECONDARY AWARD, CERTIFICATE, OR DIPLOMA (LESS THAN 1 ACADEMIC YEAR) — Requires completion of an organized program of study at the postsecondary level (below the baccalaureate degree) in less than 1 academic year (2 semesters or 3 quarters) or in less than 900 contact hours by a student enrolled full time. (Part B)

POSTSECONDARY AWARD, CERTIFICATE, OR DIPLOMA (AT LEAST 1 BUT LESS THAN 2 ACADEMIC YEARS) — Requires completion of an organized program of study at the postsecondary level (below the baccalaureate degree) in at least 1 but less than 2 full-time equivalent academic years, or designed for completion in at least 30 but less than 60 credit hours, or in at least 900 but less than 1,800 contact hours. (Part B)

POSTSECONDARY AWARD, CERTIFICATE, OR DIPLOMA (AT LEAST 2 BUT LESS THAN 4 ACADEMIC YEARS) — Requires completion of an organized program of study at the postsecondary level (below the baccalaureate degree) in at least 2 but less than 4 full-time equivalent academic years, or designed for completion in at least 60 but less than 120 credit hours, or in at least 1,800 but less than 3,600 contact hours. (Part B)

POSTSECONDARY EDUCATION — The provision of a formal instructional program whose curriculum is designed primarily for students who are beyond the compulsory age for high school. This includes programs whose purpose is academic, vocational, and continuing professional education, and excludes avocational and adult basic education programs.

PRIMARY OCCUPATIONAL ACTIVITY — The principal activity of a staff member as determined by the institution. If an individual participates in two or more activities, the primary activity is normally determined by the amount of time spent in each activity. Occupational activities are designated as follows:

- Executive, Administrative, and Managerial
- Faculty (Instruction/Research/Public Service)
- Instruction/Research Assistants
- Other Professionals (Support/Service)
- Technical and Paraprofessionals
- Clerical and Secretarial
- Skilled Crafts
- Service/Maintenance

(See separate definitions) (Part E)

PROGRAM — A combination of courses and related activities organized for the attainment of broad educational objectives as described by the institution.

PROGRAM SPECIALTY — A specific instructional program that can be identified by a 6-digit CIP code. (Part B and C)

RACE/ETHNICITY — Categories used to describe groups to which individuals belong, identify with, or belong in the eyes of the community. The categories do not denote scientific definitions of anthropological origins. A person may be counted in only one group. The groups used to categorize U.S. citizens, resident aliens, and other eligible non-citizens are:

- Black, non-Hispanic
- American Indian or Alaskan Native
- Asian or Pacific Islander
- Hispanic
- White, non-Hispanic

(Parts A, B, and C)

RACE/ETHNICITY UNKNOWN — Category used to classify students or employees whose race/ethnicity if not known **and** institutions are unable to place them in one of the specified racial/ethnic categories. (Part A, B, and C)

RESIDENT ALIEN (and other eligible non-citizens) — A person who is not a citizen or national of the United States and who has been admitted as a legal immigrant for the purpose of obtaining permanent resident alien status (and who holds either an alien registration card (Form I-551 or I-151), a Temporary Resident Card (Form I-688), or an Arrival-Departure Record (Form I-94) with a notation that conveys legal immigrant status such as Section 207 Refugee, Section 208 Asylee, Conditional Entrant Parolee or Cuban-Haitian). (Parts A, B, and C)

SERVICE/MAINTENANCE STAFF — Persons whose assignments require limited degrees of previously acquired skills and knowledge and in which workers perform duties that result in or contribute to the comfort, convenience, and hygiene of personnel and students or that contribute to the upkeep and care of buildings, facilities or grounds of the institutional property. Includes chauffeurs, laundry and dry cleaning operatives, cafeteria and restaurant workers, truck drivers, bus drivers, garage laborers, custodial personnel, gardeners and groundskeepers, refuse collectors, construction laborers, and security personnel. (Part E)

SKILLED CRAFTS STAFF — Persons whose assignments typically require special manual skills and a thorough and comprehensive knowledge of the processes involved in the work, acquired through on-the-job training and experience or through apprenticeship or other formal training programs. Includes mechanics and repairers, electricians, stationary engineers, skilled machinists, upholsterers, carpenters, compositors, and typesetters. (Part E)

TECHNICAL AND PARAPROFESSIONALS STAFF — Persons whose assignments require specialized knowledge or skills which may be acquired through experience or academic work, such as offered in many 2-year technical institutes, junior colleges, or through equivalent on-the-job training. Includes computer programmers (with less than a bachelor's degree) and operators, drafters, engineering aides, junior engineers, mathematical aides, licensed practical or vocational nurses, dieticians, photographers, radio operators, scientific assistants, technical illustrators, technicians (medical, dental, electronic, physical sciences), and similar occupational categories which are institutionally defined as technical assignments. (Part E)

UNDERGRADUATE — A student enrolled in a 4- or 5-year bachelor's degree program, an associate's degree program, or a vocational or technical program below the baccalaureate. (Part A)

UNDUPLICATED COUNT — The sum of students enrolled for credit with each student counted only once during the reporting period, regardless of when the student enrolled. (Part C)

VOLUME — Any printed, mimeographed, or processed work, contained in one binding or portfolio, hardbound or paperbound, that has been cataloged, classified, or otherwise made ready for use. (Part F)

WHITE, NON-HISPANIC — A person having origins in any of the original peoples of Europe, North Africa, or the Middle East (except those of Hispanic origin). (Parts A, B, and C)

BEST COPY AVAILABLE

APPENDIX B.

Code Book for the Survey Interview of Library Representatives

Project: NCES 7179
Purpose: Code book for the Academic Library Representative Interview
Author: Christopher C. Marston
Date: 3 December 1997
Last Revision: 3 December 1997

Participation

During which of the following years have you participated or helped to distribute the Survey on Academic Libraries? (Check all that apply.)

__1996 **PARTC96** (1=YES, 0=NO)
__1994 **PARTC94** (1=YES, 0=NO)
__1992 **PARTC92** (1=YES, 0=NO)

Survey Format

In recent years, NCES/IPEDS Academic Libraries Survey Advisory Committee attempted to update the questionnaire to reflect a more readable format.

Based upon knowledge of your state, were responding institution libraries easily able to answer the questions asked on form (1996) IPEDS-L Survey on Academic Libraries?

EASY (1=YES, 0=NO)
__Yes.
__No. (If no, please use the space provided to explain why not.)

Based upon all of your experiences with the Survey on Academic Libraries, is there anything NCES should add, delete, or change on the survey questionnaire form to increase the quality of information collected?

ADD (1=YES, 0=NO)
__No.
__Yes. (If so, please suggest an alternative in the space provided.)

If NCES added imprinted branch names with the previously provided parent institution names and their respective identity codes on the survey forms, this would: (Check all that apply)

BRANCH1 (1=YES, 0=NO)
__Assist state coordinators in distributing the survey forms to responding institutions.
BRANCH2 (1=YES, 0=NO)
__Help ensure complete reporting by respondents of branch library information along with their main library facilities and resources information.
BRANCH3 (1=YES, 0=NO)
__Not enhance the current survey distribution process in this state.
BRANCH4 (1=YES, 0=NO)
__Not enhance the information currently collected from the institutions.

Electronic Reporting

Which Years did your state report electronically? (Check all that apply)

__1996 **ELECT96** (1=YES, 0=NO)
__1994 **ELECT94** (1=YES, 0=NO)
__1992 **ELECT92** (1=YES, 0=NO)

In 1992 (IDEALS - 2.0) and 1994 (IDEALS - 3.0) software was used to report electronically in the survey on Academic Libraries. During those years, there were some states that reported problematic symptoms hindering IDEALS from acting at its optimal level (i.e. incompatibility of importing data from external system to IDEALS). NCES/IPEDS created IDEALS version 4.0 in-house to combat many of these problems - including offering a universal text-based format to import from external systems into IDEALS. Did you have any problems with electronic reporting in the most recent (1996) survey conducted?

PROB (1=YES, 0=NO)
__No.
__Yes. (Please describe your difficulties in the space provided here.)

Data Reporting

Part of the U.S. Department of Education's primary goal is to identify ALL education resources available nation-wide. Of the surveys published on academic libraries, NCES/IPEDS provides one of the only national data collections covering non accredited academic library resources. NCES would like to explore ways to increase participation of non accredited institutions in the Survey on Academic Libraries. Do you feel that if NCES included these institutions in a separate section within the published report associated with this survey, the inclusion might provide a basis for increased participation within that group of institution types?

NONACRE (1=YES, 0=NO)
__Yes.
__No. (Please use the space provide to explain why not.)

General Inquiry

COMMENT (1=YES, 0=NO)

Please use the remaining space to discuss any concerns or comments about the most recent Survey on Academic Libraries.

APPENDIX C.

SAS Program for Data Compilation of the Survey Interview of Library Representatives

```
*******************************************************;
*Program:   NCES Contract 7179                          *;
*Purpose:   Resource Mobilization data collection       *;
*Author:    Christopher C. Marston                      *;
*Date:      3 December 1997                             *;
*Revision:  11 February 1998                            *;
*******************************************************;

PROC FORMAT;
                VALUE PARTC96
                        1='YES'
                        0='NO'
;
                VALUE PARTC94
                        1='YES'
                        0='NO'
;
                VALUE PARTC92
                        1='YES'
                        0='NO'
;
                VALUE EASY
                        1='YES'
                        0='NO'
;
                VALUE ADD
                        1='YES'
                        0='NO'
;
                VALUE BRANCH1
                        1='ASSIST DISTRIBUTION'
                        0='NO'
;
                VALUE BRANCH2
                        1='COMPLETE REPORTING'
                        0='NO'
;
                VALUE BRANCH3
                        1='DISTR NOT ENHANCED'
                        0='NO'
;
                VALUE BRANCH4
                        1='INFO NOT ENHANCED'
                        0='NO'
;
                VALUE ELECT96
                        1='YES'
                        0='NO'
;
                VALUE ELECT94
                        1='YES'
                        0='NO'
;
                VALUE ELECT92
                        1='YES'
                        0='NO'
;
```

```
                    VALUE PROB
                            1='YES'
                            0='NO'
;
                    VALUE NONACRE
                            1='YES'
                            0='NO'
;
                    VALUE COMMENT
                            1='YES'
                            0='NO'
;
RUN
;
TITLE 'OPINION INTERVIEW OF ACADEMIC LIBRARY REPRESENTATIVES'
;
OPTIONS NODATE LS=80 PS=66
;
DATA ACADEMIC
;
                    INPUT NAME$ 6-23 STATE$ 24-25 PARTC96 PARTC94 PARTC92 EASY ADD
                            BRANCH1 BRANCH2 BRANCH3 BRANCH4
                                    ELECT96 ELECT94 ELECT92 PROB NONACRE COMMENT
;
CARDS;
**INSERT DATA HERE**
;
RUN
;
PROC PRINT;
RUN
;
PROC FREQ;
RUN
;
```

APPENDIX D.

Universe Coverage: A List of Unmatched Units

NCES/IPEDS includes the following types of institutions in their universe:

- All institutions whose primary purpose is the provision of postsecondary education
- All branches of colleges, universities, and other institutions, as long as the branch offers a full program of study (not just courses)
- Free-standing medical schools, as well as schools of nursing, schools of radiology, etc., within hospitals
- Schools offering occupational and vocational training with the intent of preparing students for work (i.e., a modeling school training for professional modeling–not just a charm school)

The following scenarios could account for most of the gap reported in this evaluation:

- A unit may have been previously in IPEDS as a separate active unit and became inactive due to a merger with another unit
- A unit could exist in IPEDS through a central collection point in a state/region
- A unit could be newly added to IPEDS
- A unit may not fit the IPEDS definition of postsecondary institution (i.e., they are not open to the general public, etc.)
- Research foundations are not a part of IPEDS

Source: **American Libraries Directory/Volume I**

NAME	CITY	STATE
Kodiak College	Kodiak	AK
Kenai Peninsula College	Sholdotna	AK
University of Alaska Northwest Campus	Nome	AK
University of Alaska Southeast–Ketchikan	Ketchikan	AK
University of Alaska Institute of Marine Science	Seward	AK
University of Alaska Anchorage Mantanuska–Susitn	Palmer	AK
Golden State Community College	Gasden	AL
Nasson Institute College	Mobile	AL
University of Arkansas–Jonesboro	Jonesboro	AR
University of Arkansas for Medical Sciences–ELD	El Dorado	AR
Arkansas State University–Jonesboro	Jonesboro	AR
University of Phoenix	Phoenix	AZ
World University	Benson	AZ
Phoenix College	Phoenix	AZ
Little Chapel of all Nations Foundation	Tucson	AZ
Simon Wiesenthal Center	Los Angeles	CA
United States International University	San Diego	CA
United Church of Religious Science	Los Angeles	CA
Indian Valley Colleges	Novato	CA
California School for the Deaf	Fremont	CA
University of Southern California–Marina Del Re	Marina Del Rey	CA
Rensselaer at Hartford	Hartford	CT
Hartford College for Women	Hartford	CT
University of Connecticut at Waterbury	Waterbury	CT
University of Connecticut–Greater Hartford	West Hartofrd	CT
Univeristy of Connecticut at Avery Point	Groton	CT
University of Connecticut at Stamford	Stamford	CT
University of Connecticut at Torrington	Torrington	CT
Southeastern College (Nova Southeastern University/Orlando)	Orlando	FL
Ellsworth Community College	Iowa Falls	IA
Muscatane Community College	Muscatane	IA
Scott Community College	Bettendorf	IA
Clinton Community College	Clinton	IA
International Graphoanalysis Society	Chicago	IL
Southern Illinois University School of Medicine	Springfield	IL
Southern Illinois University	Alton	IL

Source: **American Libraries Directory/Volume I (Continued)**

NAME	CITY	STATE
Illinois School for the Deaf	Jackonsville	IL
Indiana Vocational Technical College	Lafayette	IN
Ivy Tech State College	Anderson	IN
Baptist Bible College of Indianapolis	Indianapolis	IN
Indiana University–Purdue University	Columbus	IN
Indiana Vocational Technical College	Indianapolis	IN
University of Kansas School of Medicine–Wichita	Wichita	KS
Saint Catherine College	Saint Catherine	KY
Southeast Tech	Middlesboro	KY
Northwestern State of Louisiana	Shreveport	LA
Bershire Christian College	South Hamilton	MA
University of Maryland	Cambridge	MD
University of Maryland	Solomons	MD
Midwestern Baptist College	Pontiac	MI
Michigan Carrer & Technical Institute	Plainwell	MI
University of Minnesota–Austin	Austin	MN
University of Minnesota–Saint Paul	Saint Paul	MN
University of Minnesota–Chanhassen	Chanhassen	MN
Mankota State University	Mankota	MN
Missouri Institute of Mental Health	Saint Louis	MO
International University	Independence	MO
Dickson State University	Dickson	ND
Southeast Community College	Beatrice	NE
William Patterson College of New Jersey	Wayne	NJ
National Judicial College	Reno	NV
Mannes College of Music	New York	NY
Saint John University–Staten Island Campus	Staten Island	NY
The Immaculate Conception Pastoral Center	Douglaston	NY
Union University	Albany	NY
Albert Einstein College of Medicine	Bronx	NY
Northwest Technical College	Archbold	OH
Sisters of Notre Dame De Namur	Cincinnati	OH
Ohio State University	Prospect	OH
University of Oklahoma	Tulsa	OK
Rogers University	Tulsa	OK
Southwest Oklahoma State University at Sayre	Sayre	OK
Girard College	Philadelphia	PA
United States Naval War College	Newport	RI
Freeman Academy (Junior College)	Freeman	SD
Jonathan Edwards Colllege	Nashville	TN
East Texas State University at Taxarcana	Texarcana	TX
Universidad Nacional Autonoma De Mexico–San Anto	San Antonio	TX
Texarcana College	Texarcana	TX
Southwestern Adventist University	Keene	TX
Inspiration University	Staunton	VA
Southside Virginia Community College	Keysville	VA
National Graduate University	Arlington	VA
Virginia Seminary & College	Lynchburg	VA
Vermont College	Mountpelier	VT
Huxley College	Bellingham	WA
Peninsula Community College	Pasco	WA
Washington State University–Tri-Cities	Richlands	WA
University of Wisconsin–Rock County	Janesville	WI
University of Wisconsin–Center Baraboo–Sauk County	Baraboo	WI
University of Chicago	Williams Bay	WI
Southern West Virginia Community & Technical College	Williamson	WV
Greenbrair Community College	Lewisburg	WV

Source: **Peterson's (World Wide Web Listing)**
(Note - Not all city information was available.)

NAME	CITY	STATE
International Baptist College	Tempe	AZ
Hope International University	Fullerton	CA
University of West Los Angeles	Inglewood	CA
International University	Engelwood	CO
McGraw-Hill World University		DC
Hawaii Tokai International College	Honolulu	HI
Pathology and Cytology Laboratories Inc		KY
American College of Prehospital Medicine		LA
Griggs University	Silver Spring	MD
Maple Springs Baptist Bible College and Seminary	Capitol Heights	MD
National American University		MO
Carolinas College of Health Sciences		NC
University System College for Lifelong Learning		NH
Livingston College		NJ
Douglass College		NJ
Mason Gross School of the Arts		NJ
Newark College of Arts and Sciences		NJ
Rutgers The State University of New Jersey College of Engineering	Piscataway	NJ
Rutgers The State University of New Jersey Douglass College	New Brunswick	NJ
Cook College		NJ
National American University		NM
Polytechnic University–Farmingdale Campus		NY
National American University		SD
National Institute of Technology		WV
North Seattle Community College		WA
Mountain West College		UT
Dominion College		WA
American College of Nutrition	Knoxville	TN
ICI University	Irving	TX

Source: **University of Florida (World Wide W eb Listing)**
(Note - Not all city and state information was available if the URL for the unit was not active at the time of comparison.)

NAME	CITY	STATE
American Baptist Theological Seminary		
American Bible College and Seminary		
American Graduate School of International Management		
Athena University		
Dawson College		
Florida Gulf Coast University		
Greenleaf University		
Smith Chapel Bible College		
The Open University		
University of Illinois at Springfield		
University of Phoenix		
William Paterson College		

ISBN 0-16-050133-4

ERIC

United States
Department of Education
Washington, DC 20208–5652

Official Business
Penalty for Private Use, $300

Postage and Fees Paid
U.S. Department of Education
Permit No. G–17

Standard Mail (A)

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

NOTICE

REPRODUCTION BASIS

☐ This document is covered by a signed "Reproduction Release (Blanket) form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.

☒ This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").