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ABSTRACT

This report presents the results of a study the objective of which was to determine how widespread automated acquisitions systems are in North Texas' Association of Higher Education (AHE) libraries and what the characteristics of these systems are. The paper is divided into five chapters. Chapter 1 provides an introduction to the paper and an overview of the study. In chapter 2 the review of the literature is discussed in four categories: (1) general bibliographies on acquisitions; (2) early automated acquisitions systems of the 1960s; (3) automated acquisitions systems in the 1970s; and (4) automated acquisitions systems in the 1980s. Chapter 3 identifies the methodology and includes the survey objectives and definitions of terms. The study findings and a discussion of the characteristics of libraries with automated acquisitions systems and the characteristics of the systems are given in chapter 4. Chapter 5 presents a summary of the study, its conclusions, and recommendations for further studies. Concluding the paper are a list of the AHE institutions, the survey cover letter, survey questionnaire, and a map of AHE North Texas Libraries. It is noted that two of the study's major conclusions are: (1) libraries are increasingly realizing the need to automate acquisitions; and (2) the library consortium can benefit from automated acquisitions because it significantly improves collection management, especially in times of budget cuts and escalating materials costs. (23 references/17 tables) (MAB)

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CHARACTERISTICS OF AUTOMATED ACQUISITIONS SYSTEMS IN
ORGANIZATIONS BELONGING TO THE ASSOCIATION FOR HIGHER
EDUCATION OF NORTH TEXAS

A PROFESSIONAL PAPER
SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF MASTER OF LIBRARY SCIENCE
IN THE GRADUATE SCHOOL OF THE
TEXAS WOMAN'S UNIVERSITY

SCHOOL OF LIBRARY AND INFORMATION STUDIES

BY
THERESA JOHNSON-BLOUNT, B. S.

DENTON, TEXAS
AUGUST 1990

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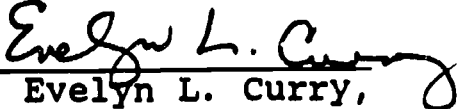
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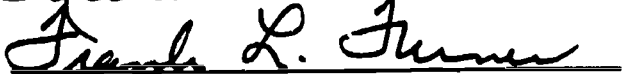
AUGUST, 1990

To the Dean of the School of Library
and Information Studies:

I am submitting herewith a professional paper written by
Theresa Johnson-Blount entitled "Characteristics of
Automated Acquisitions Systems In Organizations Belonging To
The Association For Higher Education of North Texas (AHE)."
I have examined the fiociation For Higher Education of North
Texas." I have examined the final copy of this paper for
form and content and recommend that it be accepted in
partial fulfillment of the requirements for the degree of
Master of Library Science.


Dr. Evelyn L. Curry,
Major Professor

We have read this paper and
recommend its acceptance:

Accepted

Brooke E. Sheldon, Dean
School of Library and
Information Studies

DEDICATION

This professional paper is dedicated to my family: husband, William Blount III; children, Tyaisha Alyce, Wilicia Ellen, Remus Allen; mother-in-law, Mrs. Mary Ellen Blount; sister Mary Margaret Elo; and parents, Rosella and Willie Johnson. Thanks are also extended to administrators at the Louisiana State University: Kathleen Heim, Dean of the Graduate School, and Sharon Hogan, Director of Libraries. Dr. Brooke E. Sheldon, Dean of the School of Library and Information Studies, Texas Woman's University, has been especially helpful, together with other members of the faculty and staff. The paper is also dedicated to my late son, William Blount IV, and to Karen Harrison, a former library science classmate. All have been understanding and encouraging, strengthening my commitment to pursue this educational goal.

TABLE OF CONTENTS

DEDICATION.	iii
Chapter	
I. INTRODUCTION.	1
II. REVIEW OF LITERATURE.	3
General Bibliographies.	3
Early Automated Acquisitions Systems of the 1960s.	4
Automated Acquisitions Systems in the 1970s	7
Automated Acquisitions Systems in the 1980s	9
III. METHODOLOGY	14
Methodology	14
Survey Objectives	14
Definition of Terms	14
IV. FINDINGS AND DISCUSSION	18
Characteristics of Libraries with Automated Acquisitions Systems.	20
Characteristics of Automated Acquisitions Systems.	24
V. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS FOR FURTHER STUDY	36
Summary	36
Conclusions	37
Recommendations for Further Study	37
REFERENCES.	38

APPENDIX

A. Institutions of the Association of Higher Education	40
B. Survey Cover Letter.	42
C. Survey Questionnaire	43
D. Map of Association of Higher Education Libraries.	48

LIST OF TABLES

1.	Respondents by Type of Library.	19
2.	Comparison of Libraries with Automated Acquisitions Systems and Libraries Without Automated Acquisitions Systems.	20
3.	Number of Students/Patrons/Clients in Libraries with Automated Acquisitions Systems . .	21
4.	Number of Volumes in Libraries with Acquisitions Systems.	22
5.	Library Materials Budget.	23
6.	Vendors Used by Libraries	24
7.	Selection Criteria for Automated Acquisitions Systems	25
8.	Funding Patterns for System Libraries with Acquisitions Systems	26
9.	Types of Acquisitions Systems	27
10.	Types of Computers with Acquisitions Systems. . .	28
11.	Backup for Automated Acquisitions Systems	29
12.	Benefits of Automated Acquisitions Systems. . . .	30
13.	Significant Effects of An Automated Acquisitions Systems on Library Services and Collections	31
14.	Unresolved Problems with Automated Acquisitions Systems.	32
15.	Disadvantages in Using An Automated Acquisitions System to Staff and Library Services.	33

16.	Age of Automated Acquisitions Systems	34
17.	Major Anticipated Changes for the Next Three Years	35

CHAPTER I
INTRODUCTION

Acquisitions work in a library is the means by which additions are made to the library's collection. It is comprised of ordering, gifts, exchange, serials, and binding processes in a library. Through the coordination of these processes, the true character of acquisitions work emerges: it is at one and the same time the "spark plug" for and the "brake" on the building of a library collection. As the spark plug, it is responsible for coordinating the expenditure of a library's funds with the needs of its collection and, as the brake, it keeps these expenditures within the boundaries laid down when funds for the library are appropriated. It is closer to the library's administrative functions than is the work of any other department (Wulfekoetter, 1967).

Automation of acquisitions has been slow. The reasons for this are numerous. However, two primary ones include: the complexities of the acquisitions tasks which demand time and expense in computer-based system development and the evolving organizational structure in the performance of the acquisitions task (Nicol, 1989).

The purposes of this study were to determine the characteristics of currently used automated acquisitions systems in organizations belonging to the Association of Higher Education of North Texas (AHE). Libraries in the organizations were studied.

This paper is divided into five chapters. These include an introduction; a review of the literature; methodology; findings and discussion; and summary, conclusions and recommendations for further studies.

CHAPTER II

REVIEW OF LITERATURE

A literature search was conducted using the following selected indexes, abstracts, journals and databases:

Library Literature, Library and Information Science Abstracts, Journal of Library Automation, Library Resources and Technical Services, Computer Equipment Review, Journal of Library Acquisitions, Library Acquisitions: Practice and Theory, ERIC, Wilson Line (Library Literature), and DIALOG. Professional papers from the Library School Library of the Texas Woman's University were also examined.

The review of the literature will be discussed in four categories. They include: 1) general bibliographies on acquisitions, 2) early automated acquisitions systems of the 1960s, 3) automated acquisitions systems in the 1970s, and 4) automated acquisitions systems in the 1980s.

General Bibliographies

Two excellent bibliographies on the subject of acquisitions provided essential background information for this study. The first one, Collection Development and Acquisitions, 1970-80: An Annotated Critical Bibliography (Godden et al. 1982), was compiled to note "trends" in acquisitions and collection development during the last

decade and included 345 items. The second bibliography, Automated Acquisitions: A Bibliography (Heyman, 1980) focused on systems in use during 1970. Heyman's major divisions included automated acquisitions in individual libraries, related vendors, networks, and publishers (Heyman, 1980).

Early Automated Acquisitions Systems of the 1960s

Boss discusses acquisitions automation which began in the mid-1960s during a period when most institutions were experiencing rapid growth and large library budgets. Such growth was common to a number of libraries. The need to increase staff productivity was emphasized and jobs were labor intensive. Early acquisitions systems tended to be one of two types: either fund accounting or order/receipt control systems. Fund accounting systems were particularly prevalent in the 1960s because acquisitions is primarily a business-type activity and therefore presumably easy to automate. Most of the early systems were not comprehensive in their development because of technological, financial or political problems (Bierman, 1980).

The mid-1960s was the period of blanket order development. A number of libraries, primarily in academic institutions, placed orders with jobbers to automatically supply all research-level materials produced by major publishers. The libraries were thus relieved of much of the

paperwork of ordering. But the solutions for improving library productivity were developed by librarians, while blanket orders by computers were developed by book wholesalers. Some libraries that produced individual purchase orders by computers were forced to revert to manual methods, because they could not find an effective way to use the computer to handle the blanket orders which represented an increasingly large percentage of total acquisitions (Boss, 1982).

The orientation of the acquisitions librarian was toward the mechanics of ordering materials rather than on collection development. Few automation options were available in the mid-1960s. Libraries acquired dedicated main-frame computers and developed in-house systems, used the main campus or institution's computer or imported software packages.

Specifications in the early days of automated acquisitions created problems. First, purchase orders and other forms were prepared with a single keying; second, prompt and accurate posting of encumbrances against accounts and subject allocation was required; third, there could be no manual alphabetizing or sorting; fourth, a current outstanding order file was needed to handle the tremendous amount of purchasing activities; fifth, there was a need for automatic claiming, libraries had lapsing funds and could

not over encumbered funds; sixth, a record of all receipts was required; seventh, the posting and payment was associated with preparation of vouchers for the accounting unit and then the preparation of the check; eighth, statistics on expenditures were very important so that libraries knew how much to spend and, finally, statistics on vendor performance (how long it took vendors to deliver materials) were kept (Boss, 1980).

There were some negative effects of early automation despite the elimination of multiple typing, manual alphabetizing and despite the good claims of the systems. The batch process system overwhelmed the library staff with printouts and punched cards. The cost was higher than expected; an estimation for one year was approximately \$30,000. The research-oriented computer center on campus for example, would penalized heavy users of output devices, such as the printer (Abbott, 1980).

The first vendor-supplied system was a batch software package, a product of North America's largest book wholesaler, Baker & Taylor (B&T). The BATAB system was first made available in 1969 and was purchased by more than four dozen libraries, which mounted it on their local full-size computers. This system, although still used by several libraries, is no longer supported. It was marketed by B&T for eight years as the most comprehensive, commercially-

developed system available at the time, offering selection lists, purchase orders, multiple-part order sets, open order reports, in-process reports, detailed funds accounting, invoice clearing, the capacity to detect problem invoices, claim and cancellation notices, vendor lists, statistics, and various exception and historical reports (Bierman, 1980).

Univac 1108 was one of the systems used in the 1960s. This system was first used by the University of Michigan.

Automated Acquisitions Systems in the 1970s

In 1972, a new company, CLSI, introduced an online minicomputer-based acquisitions system. The system featured the creation and printing of purchase orders, on-order/in-process control, accounting, etc. At least nine systems were sold before the company changed its focus to circulation control (when it discovered that acquisitions automation was extremely difficult to standardize because each library wanted different purchase order formats and accounting procedures).

In 1978, IROS (Instant Response Order System), an online ordering system, was developed by Brodart, a major book jobber. The system allowed libraries to access Brodart's files to determine which titles were available and to place orders online. Users only needed a computer terminal and a modem to access the system. Its range of

functions was limited, excluding such operations as order control, in-process files, fund accounting, etc.

The Washington Library Network (WIN), a regional bibliographic utility, was the first utility to offer an acquisitions system. Introduced in 1978, the system provided a full range of ordering and accounting functions.

By the late 1970s, as the number of vendor-supported systems grew, many of the in-house systems in use in libraries were more than a decade old. Almost all of them were batch systems, developed for full-size computers available to libraries. Batch systems normally had response time measured in days and were almost always limited to single functions. There was, therefore, a gradual movement from batch to online systems in the late 1970s, with a majority of the libraries adopting vendor-produced systems (Boss, 1982).

Libraries using automated systems up to the late 1970s generally fell into two distinct categories -- those which utilized a system developed and supported by a outside source, such as one of the bibliographic utilities (OCLC or RLIN), or a turnkey or distributed system, such as GEAC or NOTIS; and those that had an automated system developed in-house, such as the University of Georgia or Penn State.

A different type, however, is illustrated by MARVEL (Managing Resources for University Libraries), which

supports "functionally integrated" activities for collection development, ordering, receiving, fund accounting, circulation, and an online public access catalog. The MARVEL System design was begun in the mid-1970s and implemented in 1978 (Somers, 1987).

Automated Acquisitions Systems in the 1980s

Approximately one out of five libraries with annual acquisitions budget of more than \$200,000 were using an automated acquisitions system by late 1981. The most common systems in use were the online ordering system of the major book wholesalers: Baker and Taylor's LIBRIS and Brodart's OLAS (the successor to IROS). Nearly 100 libraries were using these systems, the majority of them large public libraries.

Most of the 60 in-house systems that could be identified in the early 1980s were in academic libraries. The smallest, but fastest growing, segment was the bibliographic utility system. Approximately 15 libraries were using the Washington Library Network's system, the oldest comprehensive, online acquisitions system developed for use in a multi-library environment. Another 20 libraries were using the OCLC (Online Computer Library Center) acquisitions system released in late 1981, and more than 30 other libraries had placed orders for it. Eleven Research Library Information Network (RLIN) users had

committed themselves to use that utility's acquisitions system, still under development in 1981.

In 1982, the three major software packet options were: DOBIS/LEUVEN, Maggie's Place and NOTIS. DOBIS/LEUVEN began in 1971; the combined system supported cataloging, searching acquisitions and circulation. DOBIS was oriented to technical services and LEUVEN to public services. Maggie's Place system provided a separate encumbrance report for acquisitions, circulation, community resources, periodical and administrative tasks.

NOTIS III is a comprehensive library materials management system developed by the Northwestern University Library. NOTIS functions include acquisitions processing, serials and circulation control modules.

The 1984 issue of Computer Equipment Review presents a detailed report on four multi-functional library systems. The multi-functional library system utilizes a single bibliographic data base and common software to support cataloging, circulation control, and related operations. Of the four products discussed in the issue, two were sold as turnkey configurations of hardware and software packages for implementation on customer-owned computers. A description of the systems follows.

Turnkey systems included the Automated Library Information System (ALIS) from Data Phase Corporation and

the LS/2000 system from OCLC. ALIS was the older and more widely utilized; the OCLC LS/2000 system was a much enhanced implementation of the Integrated Library System (ILS) developed by the National Library of Medicine. The (OCLC) system ran on Data General or DEC minicomputers, supporting circulation control and an attractive public access catalog module. The project enhancements added acquisitions, serials control and a reservations subsystem.

The Dortmund and LEUVEN Library System (DORIS/LIBIS) is an interesting and powerful software package for the IBM mainframe computer. Developed by IBM Deutschland and widely installed outside North America, it supports online cataloging, circulation, online retrieval, acquisitions, and periodicals control.

The Virginia Tech Library System (VTLS) is an intelligently conceived, well-designed software package for Hewlett-Packard's popular HP-3000 Series of minicomputers. Its current release supports cataloging, circulation control and the public-access catalog.

Calhoun et al (1982) describes the automated acquisitions system at Knox College Library that provided access to the main computer in the Science/Math Center. The library's account was stored on a disc pack, and print files were available from either of two line printers. The system's hardware is all made by the Digital Equipment

Corporation (VT52 terminal, PDP-11/40 main computer, RP03 disc drive, LA120 and LP05 line printer) and runs on an RSTS/E system monitor (Calhoun, 1982).

Pempe presented a paper to the LC/LITA Institute entitled "Acquisitions Automation of the Library of Congress, 1986". He outlined the development of automated acquisitions at the Library:

- 1968 Library Order Information System (LOIS) project initiated;
- 1971 Cataloging in Publication (CIP) program started; records are controlled via the online cataloging system;
- 1977 Final release of LOIS completed; the system handles only regular purchase and subscription purchase orders, and not exchange and gift requests or blanket orders;
- 1978 Monograph purchase order records from LOIS are made available for online searching via the library-wide retrieval system (MUMS)
- 1981 Blanket order records are input to preliminary control system (APIF) as an interim solution;
- 1984 Plans for new system start with contract for a current systems description;

1984 Staff resources are committed to planning and development of a new acquisitions system; a small contract to survey commercial systems is discussed; the Acquisitions Requirements Committee is formed. (pp. 323-26)

The literature of automated acquisitions over the last twenty years included the development of various systems from simple batch processing operations to more sophisticated integrated functions. The present research investigated currently used systems in libraries. Automated acquisitions activity in a North Texas library consortium was examined.

CHAPTER III

METHODOLOGY

Survey Objectives

The primary purpose of the study was to determine the characteristics of automated acquisitions systems in AHE libraries and identify AHE libraries with acquisitions systems.

The primary question posed in the study was: "How widespread are automated acquisitions systems in AHE libraries and what are their characteristics?" Subsidiary questions of the study were:

1. Which AHE libraries have automated acquisitions systems?
2. What are the characteristics of the automated acquisitions and their use?
3. What are the future likely to be of automated acquisitions systems in AHE libraries?

Definition of Terms

Terms commonly used in this study were:

1. AHE: the Association of Higher Education of North Texas, a regional not-for-profit, educational corporation, providing diverse support service to twenty-three (23) public and private colleges and universities in partnership with fifteen private-sectors corporations and two major

public libraries (Library Resources of The North Texas Area, 1989, p. 5).

2. System compatibility or integration: the unity of effort among subsystems, each of which concentrates on a specific function or process (Journal of Library Automation, 1980, p. 245).

3. Acquisitions: the set of processes necessary to order, claim, receive, pay and account for materials (Journal of Library Automation, 1980, vol. 13/3, Sept. p. 181).

4. Batch Systems: systems in which data are stock-piled and only periodically fed into a computer, which is always a full-size computer outside the library. Punch cards or magnetic tapes are the most common forms of input; output is usually in printout (Automating Library Acquisition, Issues and Outlook, 1982, pp. 7-8).

5. Integrated Library System: an automated library system containing several component functional systems, such as acquisitions, circulation, cataloging, the online catalog, and serials control.

Methodology

A questionnaire was designed to determine the use of automated acquisitions systems in AHE libraries in North Texas. The areas covered in the questionnaire were grouped into four categories: (1) demographic characteristics of

the library, (2) availability of automated acquisitions systems in the library, (3) characteristics of automated acquisitions systems in the library, and (4) impact and future of automated acquisitions systems. The survey instrument was a four-page questionnaire of 26 questions based on the study: "Survey of Online Systems in U.S. Academic Libraries", College and Research Libraries, 1987.

The pretest was conducted in the North Texas area. Questionnaires were completed by an academic library and a special library. Based on the responses to the pretest, two items on the questionnaire were changed. One respondent felt that a demographics question should be worded differently: the term "student" was changed to "patrons/students/clients." Also, a question (on automated acquisitions systems) was expanded to include "easy to use" and "full MARC record" features.

The target population was AHE libraries in the North Texas Area. The survey population consisted of 21 AHE libraries listed in The Association of Higher Education of North Texas, Directory of Librarians, (1989). On June 12, 1990, questionnaires were mailed to 21 libraries not included in the pretest mailing.

Eighteen of the 21 questionnaires were returned by the June 19, 1990 deadline, providing a 85.7% response rate. One of the questionnaires was unusable. The respondent

reported that his institution was not a library, but a network to AHE libraries.

CHAPTER IV
FINDINGS AND DISCUSSION

The primary questions posed in the study were: How widespread is the use of automated acquisitions systems in AHE libraries and what are their characteristics?

Subsidiary questions of the study were:

1. Which AHE libraries have automated acquisitions systems?
2. What are the characteristics of the automated systems?
3. What is the future likely to be of automated acquisitions systems in AHE libraries?

Questionnaire item 6 addresses subsidiary question 1. Items 6-17 of the questionnaire address subsidiary question 2. Items 20-24 address subsidiary question 3. (See Appendix C).

Respondents were asked to indicate the type of library with which they were affiliated: university, professional, college, or public.

Table 1

Respondents by Type of Library

(n=17)

Library Types	Number	Percent
University	9	52.94
Professional	3	17.65
College	3	17.65
Public	2	11.76
Total	17	100.00

University libraries (9 or 52.94%) made up nearly one-half of the total population. Professional libraries (3 or 17.65%) and college libraries (3 or 17.65%), ranked second, and public libraries (2 or 11.76%) ranked third.

"How widespread is the use of automated acquisitions systems in AHE libraries;" the survey showed that the majority of the libraries do have automated acquisitions systems. The results of the survey reveal that 13, or 76.47%, libraries in organizations belonging to AHE currently have an automated acquisitions systems, while 4, or 23.53%, libraries do not. Table 2 show the results.

Table 2

Comparison of Libraries With Automated Acquisitions Systems
and Libraries Without Automated Acquisitions Systems

(n=17)

	University	Professional	College	Public	Total
System	8 (n) 61.54%		3 (n) 23.08%	2 (n) 15.38%	13 (n) 76.47%
No System	1 (n) 5.88%	3 (n) 17.65%			4 (n) 23.53%
Total	9 (n) 79.23%	3 (n) 23.65%	3 (n) 23.08%	2 (n) 15.38%	17 (n) 100%

Nearly all of the responding university libraries had an automated acquisitions systems. Three college libraries (17.65%) and 2 public libraries (11.76%) reported the use of such systems.

Characteristics of the automated acquisitions systems include descriptions of the "library" (size, number of clients, etc.) and "systems" (vendors, selection procedures, etc.). The two sets of characteristics will be discussed below.

Characteristics of Libraries With Automated
Acquisitions Systems

Respondents were asked to indicate the types of students, patrons or clients whom they serve. See Table 3 for the responses.

Table 3

Number of Students/Patrons/Clients in Libraries
with Automated Acquisitions Systems

(n=13)

Number of Students	University	College	Public	Total
Below 1,000				
1,001-4,999	2 (n) 15.38%	1 (n) 7.69%		3 (n) 23.08%
5,000-9,999	4 (n) 30.77%			4 (n) 30.77%
10,000-19,999		1 (n) 7.69%		1 (n) 7.69%
20,000-39,999	2 (n) 15.38%	1 (n) 7.69%		3 (n) 23.08%
40,000-49,999				
Over 50,000			2 (n) 15.38%	2 (n) 15.38%
Total	8 (n) 61.54%	3 (n) 23.08%	2 (n) 15.38%	2 (n) 100%

The two public libraries had the largest number of patrons; each provided service to over 50,000 patrons. Two university and one college library served 20,000-39,000 patrons. The remaining libraries served smaller campuses.

Table 4 reports the collection size of the "system libraries," including the number of monographic titles acquired each year.

Table 4

Number of Volumes In Libraries With Acquisitions Systems

(n=13)

	University	College	Public	Total
Volumes in the Collection (Excluding Microform Pieces)				
0-250,000	3 (n) 23.08%	2 (n) 15.38%		5 (n) 38.46%
250,001- 1,000,000	1 (n) 7.69%	1 (n) 7.69%		2 (n) 15.38%
Over 1,000,000	4 (n) 30.77%		2 (n) 15.38%	6 (n) 46.15%
Total	8 (n) 61.54%	3 (n) 23.08	2 (n) 15.38%	13 (n) 100%
Monographic Titles Acquired Each Year				
0-5000	2 (n) 15.38%	1 (n) 7.69%		3 (n) 23.08%
5,001- 25,000	6 (n) 46.15%	2 (n) 15.38%		8 (n) 61.54%
25,000- 40,000			1 (n) 7.69%	1 (n) 7.69%
Over 40,000			1 (n) 7.69%	1 (n) 7.69%
Total	8 (n) 61.54%	3 (n) 23.08%	2 (n) 15.38%	13 (n) 100%

Nearly one-half (6 or 46.15%) of the "system libraries" (those with automated systems) had volumes in excess of 1,000,000 pieces. Only one-third of the libraries (38.46%) had smaller collections. The majority of libraries with systems (8 or 61.54%) acquired between 5,000 and 25,000 titles per year. Twenty-three of the "system libraries"

acquired fewer titles (0-5,000). One large public library acquired 40,000 titles per year.

Respondents were asked to indicate the total library materials budget.

Table 5

Library Materials Budget

(n=13)

Budgets	University	College	Public	Total
Below \$10,000-				
\$10,000- \$24,999				
\$25,000- 49,999				
\$50,000- \$99,999	1 (n) 7.69%			1 (n) 7.69%
\$100,000- \$299,999	2 (n) 15.38%	3 (n) 23.08		5 (n) 38.46%
\$300,000- \$499,000				
\$500,000- \$750,000	1 (n) 7.69%			1 (n) 7.69%
Over \$750,000	4 (n) 30.77%		2 (n) 15.38%	6 (n) 46.15%
Total	8 (n) 61.54%	3 (n) 23.08%	2 (n) 15.38%	13 (n) 100%

Nearly one-half of the "system libraries" had annual budgets from \$50,000 to 750,000. The \$100,000-299,000 range ranked second in size (5 or 38.46%) for materials budget for these libraries.

Characteristics of Automated Acquisitions Systems

Respondents were asked to select the systems used by their libraries.

Table 6

Vendors Used by Libraries

(n=13)

Systems	University	College	Public	Total
GEAC				
DOBIS				
NOTIS	2 (n) 15.38%	1 (n) 7.69%		3 (n) 23.08%
Other	6 (n) 46.15%	2 (n) 15.38%	2 (n) 15.38%	10 (n) 76.92%
Total	8 (n) 61.54%	3 (n) 23.08%	2 (n) 15.38%	13 (n) 100%

In descending order, the leading vendor used by three AHE libraries was "NOTIS," two university and one college. Other systems included: CLSI, Multi-Lis-Canada, Co., DYNIX, OCLC, ACQ350, DRA (Data Research Associates), and B&T Acquire. GEAC and DOBIS were not reported in use at all.

Table 7 records criteria used to select the automated acquisitions systems.

Table 7

Selection Criteria for Automated Acquisitons Systems

(n=13)

Features	University	College	Public	Total
Easy to use	4(n) 30.77%			4(n) 30.77%
Screen display	1(n) 7.69%			1(n) 7.69%
Cost breakdown				
Monitoring				
Receiving	2(n)			2(n)
Paying	15.38%			15.38%
Accounting				
Interfacing with vendors	1(n) 7.69%			1(n) 7.69%
Arrangement				
File searching		1(n) 7.69%		1(n) 7.69%
Ordering	3(n) 23.08%			3(n) 23.08%
Full MARC record	1(n) 7.69%			1(n) 7.69%
Fund- Accounting	3(n) 23.08%			3(n) 23.08%
Other	7(n) 53.85%	2(n) 15.38%	2(n) 15.38%	11(n) 76.92%

The most important criteria were "easy to use," together with ordering and fund accounting capabilities. "Other" comments included: whole system was purchased; flexibility; affordable; utilized existing hardware; developed in-house, compatible with other systems in use.

Table 8 records project funding for system libraries.

Table 8

Funding Patterns for System Libraries With Acquisitions

(n=13)

Types of Funds	University	College	Public	Total
Regular Library Budget	1(n) 7.69%		1(n) 7.69%	2(n) 15.38%
Special Allocation by Institution	4(n) 30.77%	1(n) 7.69%		5(n) 38.46%
Grant from Outside Institution	1(n) 7.69%		1(n) 7.69%	2(n) 15.38%
Institution Computer Center Budget		1(n) 7.69%		1(n) 7.69%
Combination of These	1(n) 7.69%	1(n) 7.69%		2(n) 15.38%
Other	1(n) 7.69%			1(n) 7.69%
TOTAL	8(n) 61.54%	3(n) 23.08%	2(n) 15.38%	13(n) 100%

Five (38.46%) of the libraries reported that their systems were funded by "special allocations." Other types of funds were the "regular library budget," grants from outside the institution, and a combination of various alternatives.

Table 9 reports types of automated acquisition systems in use.

Table 9

Types of Acquisitions Systems

(n=13)

Systems	University	College	Public	Total
In-house	3 (n) 23.08%	1 (n) 7.69%		4 (n) 30.77%
Vendor Turnkey	4 (n) 30.77%	1 (n) 7.69%	1 (n) 7.69%	6 (n) 46.15%
Combination of Above				
Bibliography Utility	1 (n) 7.69%			1 (n) 7.69%
Other		1 (n) 7.69%	1 (n) 7.69%	2 (n) 15.38%
Total	8 (n) 61.54%	3 (n) 23.08%	2 (n) 15.38%	13 (n) 100%

"Vendors/turnkey systems" was selected by nearly one-half of the system libraries (6 or 46.15%), 4 university libraries, 1 college and 1 public library. The "in-house" system type was selected by 4 libraries (nearly one-third), 3 university and 1 college.

In regard to the types of computers used with automated acquisitions systems, respondents were asked to select from three types, microcomputers, minicomputers, and mainframe computers. The fourth choice was "don't know."

Table 10

Types of Computers Used With Acquisitions Systems Reported

(n=13)

Computer Types	University	College	Public	Total
Microcomputers	2(n) 15.38%		1(n) 7.69%	3(n) 23.08%
Minicomputers	1(n) 7.69%	1(n) 7.69%	1(n) 7.69%	3(n) 23.08%
Mainframe Computers	5(n) 38.46%	2(n) 15.38%		7(n) 53.85%
Total	8(n) 76.92%	3(n) 23.08%	2(n) 15.38%	13(n) 100%

The majority of system libraries used main-frame computers. Minicomputers and microcomputers were selected by three libraries each.

Table 11 records the types of backup used with the acquisitions systems.

Table 11

Backup for Automated Acquisitions Systems

(n=13)

Backup Choices	University	College	Public	Total
None	3 (n) 23.08%	2 (n) 15.38%	1 (n) 7.69%	6 (n) 46.15%
Hard Copy	3 (n) 23.08%	1 (n) 7.69%		4 (n) 30.77%
Microforms				
Microcomputers	1 (n) 7.69%		1 (n) 7.69%	2 (n) 15.38%
Other			1 (n) 7.69%	1 (n) 7.69%
Total	7 (n) 53.85%	3 (n) 23.08%	3 (n) 23.08%	13 (n) 100%

The preferred backup for application was "hard copy." The "microcomputer" appears to be the second backup of choice. A surprising six libraries indicated "no backup" was used!

System libraries reported important benefits of automation. See Table 12.

Table 12

Benefits of Automated Acquisitions Systems

(n=13)

Benefits	University	College	Public	Total
Orders Increased	2 (n) 15.38%	1 (n) 7.69%		3 (n) 23.08%
Staff Time Shifted to Online	2 (n) 15.38%	2 (n) 15.38%		4 (n) 30.77%
Patrons Access to "On Order"	1 (n) 7.69%	1 (n) 7.69%		2 (n) 15.38%
Claiming	1 (n) 7.69%	1 (n) 7.69%	1 (n) 7.69%	3 (n) 23.08%
Time Saving	4 (n) 30.77%	2 (n) 15.38%	1 (n) 7.69%	7 (n) 53.85%
Increased Efficiency	6 (n) 46.15%	1 (n) 7.69%		7 (n) 53.85%
Improved Service	4 (n) 30.77%	1 (n) 7.69%		5 (n) 38.46%
Searches Increased	2 (n) 15.38%	1 (n) 7.69%		3 (n) 23.08%
Increase in Workload	1 (n) 7.69%			1 (n) 7.69%
Accounting	3 (n) 23.08%	2 (n) 15.38%		5 (n) 38.46%
Expansion of Resources	1 (n) 7.69%			1 (n) 7.69%
Current Information	4 (n) 30.77%	2 (n) 15.38%	1 (n) 7.69%	7 (n) 53.85%
Labor Saving	3 (n) 23.08%	3 (n) 23.08%	1 (n) 7.69%	7 (n) 53.85%
Other	1 (n) 7.69%		1 (n) 7.69%	2 (n) 15.38%

The most cited benefits were: time saved, increased efficiency, and provision of current information. Other benefits were improved service and accounting assistance.

Table 13 further adds responses of system libraries to the question about the effects of automated acquisitions on library services and collections.

Table 13

Significant Effects of An Automated Acquisitions System on Library Services and Collections

(n=13)

Effects	University	College	Public	Total
Interlibrary Loan Increased				
Abstract/Index Titles Dropped				
Photocopying Increased				
Staff Time Shifted		1 (n) 7.69%	2 (n) 15.38%	3 (n) 23.08%
Library Funds Increased		1 (n) 7.69%	1 (n) 7.69%	2 (n) 15.38%
Other		1 (n) 7.69%		1 (n) 7.69%

As might be expected, the major significant effect of the automated acquisitions system on library services and collections was "library funds." It is unclear, however, whether the effects on library funds were negative or positive.

Unresolved problems with acquisitions systems, were addressed by system libraries.

Table 14

Unresolved Problems with Automated Acquisitions Systems

(n=13)

Problems	University	College	Public	Total
Charging/ Financing				
Staff Training	2 (n) 15.38%			2 (n) 15.38%
Equipment	1 (n) 7.69%			1 (n) 7.69%
Lack of Time/Staff	2 (n) 15.38%			2 (n) 15.38%
Quality Control	2 (n) 15.38%			2 (n) 15.38%
Other	2 (n) 15.38%			2 (n) 15.38%

No single problem was outstanding. Staff training, equipment, and quality control were cited by two libraries each. Interesting, only one university library responded to this question.

Table 15 records disadvantages cited by system libraries.

Table 15

Disadvantages in Using An Automated Acquisitions System to Staff and Library Services

(n=13)

Disadvantages	University	College	Public	Total
Unrealistic User Expectations	2 (n) 15.38%			2 (n) 15.38%
Increased Workload	1 (n) 7.69%			1 (n) 7.69%
Lack of time/ Staff	2 (n) 15.38%			2 (n) 15.38%
Other	2 (n) 15.38%			(2n) 15.38%

The most frequently cited disadvantage to staff and library services was "unrealistic user expectations." The least cited disadvantage was "increased workload." Other reasons given were: learning the system and incompatibility with other systems.

How long have AHE libraries had access to automated acquisitions systems? Table 16 reports the age of automated acquisitions in AHE libraries.

Table 16

Age of Automated Acquisitions Systems

(n=13)

Age of System	University	College	Public	Total
Less than 1 year	3(n) 23.08%	1(n) 7.69%		4(n) 30.77%
1-5 Years	5(n) 38.46%	1(n) 7.69%	2(n) 15.38%	8(n) 61.54%
More than 5 years		1(n) 7.69%		1(n) 7.69%
Total	8(n) 61.54%	3(n) 23.08%	2(n) 15.38%	13(n) 100%

Eight libraries (61.54%) have had their systems for one to 5 years; 4 (30.77%) reported having their acquisitions systems for less than one year.

Subsidiary question three addressed major anticipated changes over the next three years for system libraries. See Table 17 for results.

Table 17

Major Anticipated Changes for the Next Three Years

(n=13)

Changes	University	College	Public	Total
Add equipment	1(n) 7.69%	1(n) 7.69%		2(n) 15.38%
Increased Demands for Acquisitions Services	2(n) 15.38%	1(n) 7.69%	1(n) 7.69%	4(n) 30.77%
Add Vendors				
Ordering Increased	1(n) 7.69%	1(n) 7.69%	1(n) 7.69%	3(n) 23.08%
Other	4(n) 30.77%		2(n) 15.38%	6(n) 46.15%

Nearly one-third of the system libraries (4 or 30.77%) anticipate increased demands for automated acquisitions. Three (23.08%) expect increased ordering in the next 3 years.

In summary, automated acquisitions systems' use is widespread in AHE libraries. Characteristics are different from one facility to the next. Benefits to the libraries have generally been efficiency and ordering. Libraries expect greater demands for automated activity in the next three years.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS FOR FURTHER STUDY

Summary

The purpose of this study was to identify AHE libraries with automated acquisitions systems. A second purpose was to determine the characteristics of those automated systems.

Twenty-one AHE libraries were surveyed. Eighteen questionnaires were received (one unusable), providing a 85.7% return rate.

The majority of AHE libraries are using automated acquisitions systems and have been the last five years. Libraries with the systems are primarily university libraries; however, public and college libraries have systems as well. The "sizes of systems," and "number of patrons served" varied with the responding libraries. Nearly one third of the system libraries had large collections, over 1,000,000 volumes, with one-half of them adding between 5,000 and 25,000 monographic titles each year. Nearly one-third of the respondents fell in the 5,000-10,000 enrollment range, and another one-fourth fell in the 20,000-40,000 range. Budgets fell in the \$750,000 + range.

Vendors/turnkey systems are purchased with "special funds" and run on mainframe computers. Key system features include "easy to use," together with "fund accounting," and "ordering" capabilities. Hard copy backups are the most popular. The most important advantages of automated acquisitions systems are time saved and increased efficiency; the most cited disadvantage was "unrealistic user expectations."

Conclusions

Two major conclusions may be drawn from the study:

1. libraries are increasingly realizing the need to automate acquisitions; and
2. the library consortium can benefit from automated acquisitions because it significantly improves collection management, especially in times of budget cuts and escalating materials costs.

Recommendations for Further Study

Possibilities for further study include:

1. the comparison of automated acquisitions activity in other library consortia with the results of the present study; and
2. a user satisfaction survey of selected automated acquisitions systems.

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APPENDIX A
 INSTITUTIONS OF THE ASSOCIATION OF HIGHER EDUCATION

CITIES	AHE INSTITUTIONS
Dallas, Texas	AMIGOS Bibliographic Council
Sherman, Texas	Austin College
Dallas, Texas	Baylor College of Dentistry
Dallas, Texas	Baylor University
Dallas, Texas	Baylor University of Nursing
McKinney, Texas	Collin County Community College District
Dallas, Texas	Dallas County Community College District
Dallas, Texas	Dallas Baptist University
Dallas, Texas	Dallas Public Library
Commerce, Texas	East Texas State University
Fort Worth, Texas	Fort Worth Public Library
Wichita Falls, Texas	Midwestern State University
Dallas, Texas	Southern Methodist University
Hurst, Texas	Tarrant County Junior College District
Fort Worth, Texas	Texas Christian University
Fort Worth, Texas	Texas College of Osteopathic Medicine
Fort Worth, Texas	Texas Wesleyan University
Denton, Texas	Texas Woman's University

Irving, Texas	University of Dallas
Denton, Texas	University of North Texas
Arlington, Texas	University of Texas at Arlington
Dallas, Texas	University of Texas at Dallas
Dallas, Texas	University of Texas Southwestern Medical Center

APPENDIX B
SURVEY COVER LETTER

Texas Woman's University
P.O. Box 24186, TWU Station
Denton, Texas 76204
June 11, 1990

Dear Acquisitions Librarian:

I am a graduate school student in the School of Library and Information Studies at Texas Woman's University. To complete the MLS degree program, I am conducting research on the characteristics of automated acquisitions systems in AHE libraries in Texas. The purposes of the study are to determine how widely used these systems are and to determine their characteristics.

The enclosed form takes about 20 minutes to complete. If possible, please answer all the questions that are applicable to your library.

If possible, please complete the form and return it to me by June 19, 1990. A stamped, addressed envelope is enclosed for your convenience. All your answers will be strictly confidential. Thanks for your participation in this research.

Sincerely,

Theresa Johnson-Blount

NOTE: Please Fax this form back to me, (817/735-2283)

APPENDIX C

SURVEY QUESTIONNAIRE

CHARACTERISTICS OF AUTOMATED ACQUISITIONS SYSTEMS IN ORGANIZATIONS BELONGING TO THE ASSOCIATION FOR HIGHER EDUCATION OF NORTH TEXAS

INSTRUCTIONS--Please check the appropriate answers which are applicable to your library. If possible, complete the form and return it to me by June 19, 1990.

PART A. DEMOGRAPHIC CHARACTERISTICS OF LIBRARY

1. Which one of the follow best describes your library?
_____ university library _____ college library
_____ professional school library _____ public library
(e.g. medical, law, or seminary)
2. What is the approximate number of students/patrons/clients?
_____ below 1,000 _____ 10,000-19,999
_____ 1,001-4,999 _____ 20,000-39,999
_____ 5,000-9,999 _____ 40,000-50,999
_____ over 50,000
3. How many volumes are in your collection? (excluding microform pieces)
_____ 0-250,000
_____ 250,001-1,000,000
_____ over 1,000,000
4. How many monographic titles do you acquire each year?
(Please estimate the number at time of report)
_____ 0-5,000 _____ 25,001-40,000
_____ 5,001-25,000 _____ over 40,000
5. What is the amount of the materials budget?
_____ below \$10,000 _____ \$100,000-\$299,999
_____ \$10,001-\$24,999 _____ \$300,000-\$499,999
_____ \$25,000-\$49,999 _____ \$500,000-\$750,000
_____ \$50,000-\$99,999 _____ \$over \$750,000

PART B. CHARACTERISTICS OF AUTOMATED ACQUISITIONS SYSTEM IN LIBRARY

6. Do you have an automated acquisitions system?
_____ yes _____ no why? _____
- If you answered "no", proceed to question 18
If you answered "yes", is it

7. _____ a system developed in house?
 _____ a vendor turn key system
 _____ combination vendor/in house system
 _____ supplied through a bibliographic utility
 _____ other (please explain): _____

8. Select the system used by your library.
 _____ GEAC
 _____ DOBIS
 _____ NOTIS
 _____ Other (please specify) _____

9. What was the basis for selecting your system?
 _____ easy to use _____ file searching
 _____ screen display _____ ordering
 _____ cost breakdown _____ full MARC record
 _____ monitoring _____ fund accounting
 _____ receiving/paying/accounting _____ other (explain):
 _____ interfacing with vendors _____
 _____ arrangement _____
10. How was it funded initially?
 _____ regular library budget
 _____ special allocation by institution
 _____ grant from outside institution
 _____ institution computer center budget
 _____ combination of these
 _____ other (please explain): _____

11. What back up do you provide when the acquisition system is down?
 _____ none
 _____ hardcopy
 _____ microform
 _____ microcomputer
 _____ combination of these
 _____ other (please explain): _____

12. What level of computer is used to run the system?
 micro
 mini
 mainframe
 don't know
13. Is the computer
 dedicated solely to your library operations
 shared with parent institution
 provided by a bibliographic utility, commercial service or vendor?
14. Which of the following processes does the acquisitions system include? (check all that apply)
- | | Now | Planned |
|---------------------------------|--------------------------|--------------------------|
| ordering | <input type="checkbox"/> | <input type="checkbox"/> |
| claiming | <input type="checkbox"/> | <input type="checkbox"/> |
| in process control | <input type="checkbox"/> | <input type="checkbox"/> |
| binding | <input type="checkbox"/> | <input type="checkbox"/> |
| accounting | <input type="checkbox"/> | <input type="checkbox"/> |
| vendor control | <input type="checkbox"/> | <input type="checkbox"/> |
| online interface with vendor(s) | <input type="checkbox"/> | <input type="checkbox"/> |
| generation of reports | <input type="checkbox"/> | <input type="checkbox"/> |
| interlibrary loan | <input type="checkbox"/> | <input type="checkbox"/> |
| on-line catalog | <input type="checkbox"/> | <input type="checkbox"/> |
15. Is order information available online to the public?
 yes
 no
16. How long have you had an acquisition system?
 less than 1 year
 1-5 years
 more than 5 years
17. Can the acquisitions system connect with other systems in the library/campus or campus/public libraries?
 patron access catalog
 home access (for instructors)
 serials
 circulation
 other department access (explain): _____

18. If your library does **not** currently have an automated acquisitions system, are there plans to install one?

don't know

no

yes

If yes,

within 1 year

1-5 years

more than 5 years

19. If not, why not?

lack of funding

lack of staffing

service provided elsewhere

other (please specify)

PART C. IMPACT AND FUTURE OF AUTOMATED ACQUISITIONS SYSTEM

20. What are the unresolved problems in the automated acquisitions system? (check as many as apply)

charging/financing

staff training

equipment

lack of time/staff

quality control

other (please specify)

21. What are the important benefits? (check as many as apply)

ordering increased

staff time shifted to online

patrons access to "on order"

claiming

time savings

increased efficiency

improved service

searching increased

increased in workload

accounting

expansion of resources

current information

labor saving

other (please specify)

22. What are the disadvantages in using an automated acquisitions system on staff and library services? (check as many as apply)

unrealistic user expectation

increased workload

lack of time/staff

other (please specify)

23. What are the significant effects of an automated acquisitions system on library services and collections? (check as many as apply)

interlibrary loan increased

abstract/index titles dropped

photocopying service increased

staff time shifted

library funds shifted

others (explain):

24. What will be the major anticipated changes for the next three years? (check as many as apply)
- add equipment
 - increased demands for acquisitions services
 - add vendors
 - ordering increased
 - other (explain) _____

PART D. ADDITIONAL INFORMATION

25. Name: _____
- Title or Position: _____
- Business address: _____
26. Other comments: _____

Please return questionnaire to: Theresa Johnson-Blount, Texas Woman's University, P.O. Box 24186, TWU Station, Lenton Texas, 76204. THANK YOU!

APPENDIX D

MAP OF ASSOCIATION FOR HIGHER EDUCATION OF NORTH TEXAS LIBRARIES

