Background

Consumers expect to be able to access quality, state-of-the-art information services through America's public libraries. This expectation includes librarians facilitating the consumer's access to information as well as the equipment needed to provide that access. The fulfillment of the information age includes having information available when and where it is needed. Libraries with adequate funding can more readily meet consumers' information needs by providing a broad variety of technological and automated resources. Small rural libraries with limited funding, however, struggle to meet even the most basic information needs. Limited funding affects the quality of technology, resources, and staffing.

Most states, including Kansas, publish standards for technology, resources, and personnel training. The purpose of this study was to ascertain if public libraries in Kansas serving a population of less than 1,000 meet the automation equipment and personnel training standards as defined in the Measurements of Quality: Public Library Standards for Kansas (1995).

Methodology

The study design was non-experimental and non-randomized with descriptive analysis. Data were collected using a mailed survey and verbal interviews. Surveys were mailed to all
Kansas public libraries that were classified as gateway or linking libraries, in other words, those that have a service population of under 1,000. There were a total of 130 libraries identified as fitting the definition of linking and gateway libraries in the State of Kansas. Of the 130 surveys mailed, 115 (88%) were completed and returned during the data collection period. Further interviews were conducted verbally with those libraries returning the survey that noted they had installed an automation system (n=10) to gain information on personnel training. Seven of these ten automated libraries participated in the interview process.

Results

Of the 115 surveys completed and returned, 71% had computers, 50% had email, 49% had access to C-ROM/online databases, 36% used automated ILL, 25% had facsimile machines, and 9% were automated. From this study, it was not possible to ascertain if the public libraries in Kansas serving a population of less than 1,000 which reported being automated met the personnel training standards as defined in the Measurements of Quality: Public Library Standards for Kansas (1995). Of the 115 returned surveys, ten libraries reported having an automated system. Of these ten libraries, seven consented to and participated in verbal interviews. Interviews revealed that only three of these seven libraries had their card catalog/circulation automated. There was a misunderstanding interpreting the term “automation system” and the other four interpreted it to mean having a personal computer available in their library. As the remaining libraries did not participate in the interviews, their automation status is unknown. Therefore, determination of the personnel training standards was difficult to ascertain and emphasis was then placed on garnering information of the technological equipment status and meeting those standards for the smallest rural public libraries in Kansas.
Summary

This study examined public libraries in the State of Kansas only and found there was difficulty for small libraries in complying with the standards related to automation equipment and personnel training which does demonstrate the standards are set at a very good level for self-monitoring. Library directors and boards have the opportunity to evaluate their own situations and compare where they meet, or do not meet, the public library standards. The data from this study can be used in a multiplicity of ways, be it examination of the individual libraries, the regional systems, or the standards themselves. It is also evident there are many strengths within the smallest libraries in Kansas, and library directors can build on these to improve their own library services.
ACKNOWLEDGMENTS

There are many who assisted with this project as well as providing me support throughout the master’s program. I want to first thank Marty Hale whose heartfelt caring and true dedication to the art of librarianship has touched so many of us in the SLIM program at Emporia State University. Marty, your ready smile helped keep me going and your encouraging, positive attitude kept my eyes focused on the road ahead. I can’t thank you enough.

Bob Grover was so gracious to sit on my thesis committee when he was in such a transition time himself, and I’m ever grateful for his direction. The SLIM program is once again fortunate to have him return as dean. Under his leadership, library students will continue to be challenged and will graduate from SLIM ready to take on the new millennium.

My most devoted thanks go to Roy Bird. He took me under his wing, allowing my participation at the Kansas Standards Revisions Committee meetings and just generally guiding this neophyte down the road to libraryland. His many years of experience and vast knowledge of rural public libraries gave me a wonderful understanding of the value of these libraries, and when I became director at the small Carnegie Public Library in Albany, Missouri, Roy was almost as excited as I; it was wonderful to have someone to share that joy with. Thank you, Roy.

So many thanks go to my soul sister, Joni Walton, for hugging me, for loving me… and for kicking me in the tush on an as-needed basis as well… for dragging me to Granny’s and making me sit down amongst charts and statistics and Italian cooking. Thank you, Joni, for always caring.

To one who has always been there when I needed her, my best friend, Denise Naggi. I love you and I thank you for supporting me in everything I’ve ever wanted and ever done. There are no words that can describe what your friendship these past 35 years has meant to me. I am just ever thankful you are in my life.
Grateful thanks go to my family: my mother, JoAnn Lang, and my little sister, Melody Atcheson, whose love kept me warm and whose shoulders were always available to me. Thank you, Mom, for the coffee and newspapers in the mornings, and thank you, Melody, for your love and caring words of advice.

And finally... my loves, my treasures... my children... Steven, Cameron, Cara, Eric, and Laura. Steven, thank you for letting me be your ‘real’ mother; I’m so proud of all your accomplishments. Cameron, thank you for bearing with the difficulties that life presents; you’re truly a great kid. Cara, my sweet angel, thank you for the sharing of your heart and self; you are a lovely person inside and out. Eric, my complex, stubborn one, you teach me much about parenting and I love you and thank you for that. Laura, my baby doll, your happy face brings me such joy every day; thank you for the kisses and sugars.

Thank you, my children, for understanding my being gone for weekend intensive classes, for missing ball games and class plays, and for the seemingly-endless hours spent in front of the computer screen as I wrote class papers and this thesis. I know you don’t understand it all but you did know it was important to me, and I shall always be grateful for your love and hugs of encouragement. I could never be who I am without you.
Table of Contents

Acknowledgments

Table of Contents ................................................................. i
List of Tables ........................................................................ iv

Chapter 1: Introduction to the Study

   Background ........................................................................ 1
   Significance of the Study .................................................. 2
   Statement of the Problem .................................................. 3
   Purpose ............................................................................ 4
   Research Questions ......................................................... 4
   Terminology ...................................................................... 5
   Importance of the Study ................................................... 6

Chapter 2: Review of Related Literature

   Introduction ....................................................................... 8
   Kansas Public Library Standards ...................................... 8
   Rural Libraries and Technology ....................................... 12
   Technology Training for Library Staff .............................. 16
   Survey Effectiveness ....................................................... 18
   Summary .......................................................................... 19

Chapter 3: Methodology

   Overview .......................................................................... 21
Design of the Study ................................................................. 21
Selection of Subjects ............................................................... 21
Protection of Subjects’ Rights ................................................... 22
Inclusion and Exclusion Criteria .............................................. 22
Variables ................................................................................. 22
Limitations ............................................................................... 23
Assumptions ............................................................................. 23
Procedure ................................................................................. 23
Data Collection Instrument ....................................................... 24
Data Analysis ............................................................................ 25

Chapter 4: Results

Statistical Analysis and Evaluation ............................................ 26
Content Analysis of Personal Interviews .................................... 28

Chapter 5: Discussion

Conclusions ............................................................................... 30
Implications .............................................................................. 33
Recommendations for Further Research .................................... 36
Summary .................................................................................... 38

References ................................................................................ 39
Tables & Figures ....................................................................... 44
Appendixes:

A. Survey
B. Letter of Approval for Study
C. Cover Letter
D. Additional Comments from Returned Surveys
E. Interview Questions
List of Tables

Table 1. Levels of Service for Kansas Public Libraries

Table 2. Percentage of Gateway libraries (serving population of less than 500) and linking libraries (serving population of 500-1000) in the total sample

Table 3. Combined percentage of Gateway and Linking libraries in Kansas (serving populations less than 1000) having computers, utilizing automated interlibrary loan, CD-ROM/online databases, facsimile machine, electronic mail, and automation systems

Table 4. Percentage of reporting libraries separated by library type (Gateway and Linking) with computers, utilizing automated interlibrary loan, CD-ROM/online databases, facsimile machine, electronic mail, and automation systems

Table 5. Distribution of libraries in the sample by regional library system

Table 6. Percentage of libraries having a computer within each regional system in Kansas

Table 7. Percentage of libraries utilizing automated interlibrary loan within each regional system in Kansas

Table 8. Percentage of libraries utilizing CD-ROM/online databases within each regional system in Kansas

Table 9. Percentage of libraries having a facsimile machine within each regional system in Kansas

Table 10. Percentage of libraries utilizing electronic mail within each regional system in Kansas

Table 11. Percentage of libraries having an automated system within each regional system in Kansas

Table 12. Percentages of reporting libraries having a computer within each library type (Gateway and Linking) in Kansas

Table 13. Percentages of reporting libraries utilizing automated interlibrary loan within each library type (Gateway and Linking) in Kansas

Table 14. Percentages of reporting libraries utilizing CD-ROM/online databases within each library type (Gateway and Linking) in Kansas
Table 15. Percentages of reporting libraries having a facsimile machine within each library type (Gateway and Linking) in Kansas

Table 16. Percentages of reporting libraries utilizing electronic mail within each library type (Gateway and Linking) in Kansas

Table 17. Percentages of reporting libraries having an automated system within each library type (Gateway and Linking) in Kansas

Table 18. Central tendencies for paid and volunteer staff in the total sample of public libraries serving a population of less than 1000 in the State of Kansas
Chapter 1
Introduction to the Study

Background

Consumers expect to be able to access quality, state-of-the-art information services through America’s public libraries. This expectation includes librarians facilitating the consumer’s access to information as well as the equipment needed to provide that access. The fulfillment of the information age includes having information available when and where it is needed. In both rural and urban areas, information is being substituted for time, labor, and energy (Dillman, 1991). Libraries with adequate funding can more readily meet consumers’ information needs by providing a broad variety of technological and automated resources. Small rural libraries with limited funding, however, struggle to meet even the most basic information needs. Limited funding affects the quality of technology, resources, and staffing.

In 1943, the American Library Association (ALA) published national public library standards. These included objectives to “maintain the precious heritage of freedom of expression and a constructively critical attitude toward all public issues and aiding in the advancement of knowledge” (p. 8). Identified in these standards were quantitative measures set for the education, training, and qualifications of library personnel as well as for book collections. In 1971, the Public Library Association, a division of ALA, voted not to revise or update the 1943 standards as they did not wish to quantify library services. Instead, emphasis was to be placed with local planning and evaluation of library services (Owen, 1992). Following that recommendation, most states, including Kansas, now publish standards for technology, resources, and personnel training. Owen (1992) conducted an examination of the library standards of every state in the United States and found that almost every state has
public library standards of some type. Four states did not participate in Owen's study. This study went further than just collecting standards and examined and delineated the differences between standards, guidelines, and state aid requirements. Owen (1992) defined standards as those which have a qualifying impact if the standard is not met. Guidelines are recommendations made with minimum requirements but no kind of impact if the standard is not met. State aid requirements give minimal requirements to be met to receive state financial aid. Regardless of the terminology used, practically every state produces a document to ensure provision of excellent library services. Owen's research found that Kansas was among the first states to establish written automation standards; additionally, at that time, only a couple of other state standards included automation, and Kansas was found to be the only state which included measurable automation standards.

One of the purposes of the Measurements of Quality: Public Library Standards for Kansas (1995) is to prevent substandard library services and to encourage progressive provision of information services. The smallest rural public libraries in Kansas face many logistical challenges in meeting these standards, including that of maintaining qualified staff. With the advancing technological impact of the new century, rural public libraries will be facing a major crisis and failure of the system if these challenges cannot be met.

Significance of the Study

The 1990s have ushered in the information age, and access to information is just as critical to those in rural communities, if not more so, than their urban counterparts. Over the past two decades, the increase in the lack of timely information and economic growth in rural areas is directly related to decreases in population, wage income, and educational levels (Mazie, 1995). However, the Internet is one particularly effective method in providing rural
communities with the same information available to urban patrons. As public access to the Internet is brought to libraries, a vast amount of information is easily accessed by communities at an affordable price. According to a survey done by the U.S. Department of Education in 1992, 97.4% of all rural counties have at least one public library outlet and 46% of this nation's libraries are in cities of less than 5,000 (Houlahon, 1991; Mazie, 1995). With this resource already in place, the equitable provision of information access opportunities for rural communities can be achieved. Vavrek (1993) states rural public libraries must change the perception of their patrons, seeing their local library as an information center used to meet everyday information needs rather than as a warehouse of popular reading materials. In other words, envisioning their library as a valuable service rather than merely a place to visit (Vavrek, 1993; 1995). To remain viable information centers, public libraries must have the equipment to access needed information for their patrons as well as trained personnel to assist in the provision of the consumer's need for information. It is an expectation that public libraries have the equipment to access information and that the librarian is educated and trained to assist patrons in obtaining that information.

Statement of the Problem

Rural public libraries attempting to transition into the 21st century may fail to meet the automation equipment and personnel training standards. Critics of rural public libraries express concern. Vavrek (1993) stated "the education/training deficiency is so enormous and present methods are so inadequate that they cannot possibly cope with the future challenges as currently configured" (p. 27). Rural libraries in the State of Kansas may not meet automation equipment or personnel training standards as defined in the Measurements of Quality: Public Library Standards for Kansas (1995). It may be that small rural public
libraries may not have the needed equipment for personnel to gain training on, or the personnel may not realize the need for the equipment to provide optimum library services. These two issues are linked in the process of library services meeting the information needs of patrons.

Uneducated and/or undertrained library staff are a great hindrance to consumers when accessing information; however, trained and educated staff without automation equipment are just as much a hindrance to meeting information needs of their patrons. This deficiency may lead to misinformation, mistrust of the public library system, and eventually nonuse of the library rendering it no longer a viable public information resource. It may not be realistic or feasible for consumers to assume that American rural libraries are capable of existing without qualified, academically-educated staff (Vavrek, 1990). Likewise, a library without automation equipment cannot survive into the new millennium. Mazie (1995) stresses the need for funds in rural libraries to invest in their staff, providing computer training so they can facilitate their library’s transition into a telecommunications node.

Purpose

The purpose of this study was to ascertain if public libraries in Kansas serving a population of less than 1,000 meet the automation equipment and personnel training standards as defined in the Measurements of Quality: Public Library Standards for Kansas (1995).

Research Questions

1. Do public libraries in Kansas serving a population of less than 1,000 meet the automation equipment standards and have a computer, a fax, access to online or CD-ROM databases, automated interlibrary loan and electronic mail as defined in the Measurements of Quality: Public Library Standards for Kansas (1995)?
2. Do public libraries in Kansas serving a population of less than 1,000 which are automated meet the personnel training standards, as defined in the *Measurements of Quality: Public Library Standards for Kansas* (1995)?

**Terminology**

**Gateway library.** There are 81 gateway libraries in Kansas which serve populations of less than 500. A gateway library provides a communications access point with trained personnel where users can be linked to information services meeting their personal and professional needs (Kansas State Library, 1995, p. 7).

**Linking library.** There are 49 linking libraries in Kansas which serve a population between 500-1000. A linking library provides an access point with trained personnel where users can be linked to information services meeting their personal and professional needs (Kansas State Library, 1995, p. 7).

**Automation/technical consultant.** A position within the library regional systems in Kansas which specifically provides consultant services to libraries on computer and telecommunications technologies and conducting technological training of library staff.

**Computer literate.** As defined in the 1995 Public Library Standards for Kansas, computer literacy is the development and maintenance of the knowledge of what machine-assisted information resources can be provided to libraries and library users. It is an understanding of information about computers, automation, and online search systems, and an openness to any new developments and applications in libraries in these areas (Kansas State Library, 1995, p. 114).

**Electronic mail.** As defined in the 1995 Public Library Standards for Kansas, electronic mail is a message-switching service most often used with a microcomputer. With an electronic
mail service, messages can be sent to multiple parties simultaneously, they can be sent in
different formats, messages received may automatically be forwarded to other subscribers, and
messages can be maintained in electronic files for future access (Kansas State Library, 1995,
p. 114).

Telefax (facsimile). As defined in the 1995 Public Library Standards for Kansas,
facsimile is a method of electronically copying and transmitting an image (Kansas State

Automated ILL. The use of a computer linked to a telecommunications network to
route interlibrary loan requests and responses rapidly in an electronic format (Kansas State
Library, 1995, p. 113).

CD-ROM and on-line databases. A collection or file of bibliographic citations or unit
records representing original items or published literature or other recorded material in a
digital format, retrievable via electronic transfer or available on compact disc.

Importance of the Study

All libraries, not just small rural public libraries, have the potential to be vital
information sources to allow their patrons to be independent and navigated information
seekers. However, rural public libraries particularly can provide an even greater service to
their community in this manner. Rather than merely receiving information in a passive
downstream method (i.e., television, radio), by having access to an electronically-linked,
progressive library, rural patrons have the opportunity to be interactive global citizens just as
readily as their urban counterparts (Libraries for the Future, 1995). If a library truly meets the
physical standards and the training standards set out in the Measurements of Quality: Public
Library Standards for Kansas (1995), that opportunity is more likely to be realized, thus benefiting the citizens of Kansas.
Chapter 2
Review of Related Literature

Introduction

The literature review revealed a plethora of written articles on the rural library. Most of these were of a general nature with a few specific to the integration of technology, including the training of personnel in the small rural public library. A review of the literature of standards related to small rural public libraries was conducted as well as the effectiveness of surveys in research. Areas to be discussed in this review will include: the published standards for Kansas public libraries, rural libraries and technology, technology training for library staff, and survey effectiveness.

Kansas Public Library Standards

The Kansas public library standards are issued by the Kansas State Library and are reviewed and updated biennially by the Public Library Standards Committee of the Kansas Library Association. These standards address and provide for the evaluation of all public libraries in Kansas. The origin of the Kansas standards before 1988 was a document consisting of five pages to satisfy the minimum LSCA requirements for distribution of federal grants to public libraries (Bird, 1998). At the time of this writing, a duly-appointed Public Library Standards Committee is reviewing and updating the 1995 issuance; it is expected the committee’s recommendations and changes will be available in late 1998/early 1999 and published as the 1999 Kansas Standards for Public Libraries.

Why have standards for public libraries? One need for library standards on the state level is simple according to Moorman (1997): economics. Libraries must document and evaluate their services for leverage in ensuring increased and/or continued funding.
Governmental agencies and elected officials may not understand or support the need for funds allocated to small rural public libraries if they do not understand the impact these information centers can provide to their communities. Other reasons to have established library standards include: (a) for having standards used as a learning tool for libraries; (b) for comparison purposes between libraries within established boundaries; and (c) for goal setting and as a planning instrument.

The Kansas public library standards. Areas covered in the Kansas public library standards included governance, operation and service, physical facilities, space for users, library staff and collections, technological applications, development of public awareness of the potential of the library, and continuing education of library staff and volunteers (Kansas State Library, 1995).

The following sections will further define the composition of the Kansas Public Library standards:

Public libraries in Kansas are divided into eight “service” levels based on total service populations, with purpose definitions and recommended standards for each level. These eight levels are identified in Table 1 (Kansas State Library, 1995).

The defined intent of the gateway library is to provide a communications access point with trained personnel where users can be linked to information services. Gateway libraries usually consist of donated materials supplemented with bulk/rotating collections. The facility, utilities, and telephone are usually provided as donations to gateway libraries.

The purpose of a linking library is to provide an access point with trained personnel where users can be linked to information services. Information is provided with an owned collection supplemented with an extensive bulk loan collection.
Service centers, regular and levels I and II, serve their communities as resources for information, entertainment, cultural opportunity, and educational development. Major resource centers, levels I and II, provide in-depth collections and service on a regional level, aiding smaller libraries with reference assistance and ILL support.

For the purposes of this study, the investigation of equipment and personnel training standards will be limited to gateway and linking libraries.

**Equipment/automation standards.** Physical equipment standards require every library, including gateway and linking libraries, in the State of Kansas to include the following: (a) telephone, (b) photocopier, (c) telefax machine, and (d) at least one computer workstation that includes a high-speed modem, and CD-ROM.

Automation/technology standards for gateway and linking libraries outline two requirements: (a) the above mentioned physical equipment; and (b) bibliographic records for all materials should be created in or converted to full MARC format and loaded into the Kansas Library Catalog (KLC). Standards also stated the library should periodically review with system personnel the possible need for an integrated library automated system. The library should also have in place a regularly updated plan for automation development.

**Personnel training standards.** According to the Kansas library standards, gateway/linking/service center, library staff should: (a) be computer literate; (b) be trained to provide direct access to automated interlibrary loan on CD-ROM and online; (c) have access to CD-ROM and online databases; (d) have a telefax; and (e) have electronic mail.

In contrast, Level I major service center staff are required to: (a) be computer literate; (b) be trained to provide direct access to automated interlibrary loan on CD-ROM and online;
(c) have access to CD-ROM and online databases; (d) have a telefax; (e) have electronic mail; and (f) be able to provide reference service through print format and online electronic access.

For a Level II Major Service Center, library staff must: (a) be computer literate; (b) be trained to provide direct access to automated interlibrary loan on CD-ROM and online; (c) have access to CD-ROM and online databases; (d) have telefax; (e) have electronic mail; (f) be able to provide reference service through print format and online electronic access with one staff member trained in the use of online technology on duty whenever the library is open; (g) be trained and able to use office software; and (h) the Director shall provide for the proper training of all support staff.

For Level I and Level II Major Resource Centers: All staff must be capable of accessing and assisting patrons in obtaining or utilizing up-to-date information in the format most appropriate for best service, according to their respective job descriptions.

Regional systems in the State of Kansas. Gateway and linking libraries are to have trained personnel who are able to assist patrons in finding the information they seek. These libraries face many logistical challenges in meeting the Kansas standards in the area of personnel training and minimum equipment standards. Libraries of all sizes have found it necessary to resource share in order to more effectively provide for their patrons' information needs (Ison, 1991; 1995).

One method of resource sharing the State of Kansas has developed is the regional systems of cooperating libraries. Kansas has seven regional systems appropriately named for their geographical locations in the state. These include the Central Kansas Library System (CKLS), Great Bend; Southcentral Kansas Library System (SCKLS), Hutchinson; Northwest Kansas Library System (NWKLS), Norton; Northcentral Kansas Library System (NCKLS),
Manhattan; Southwest Kansas Library System (SWKLS), Dodge City; Northeast Kansas Library System (NEKLS), Lawrence; and the Southeast Kansas Library System (SEKLS), Iola.

The seven systems provide a regional support to the libraries within their boundaries. This support includes such support as a courier, interlibrary loan, rotating books, continuing education, workshops, cataloging resources, cooperative acquisitions and technical services, consulting for library services and construction, and in technology assistance. The technology consultant position in each system is specifically available to assist librarians in every aspect of computer management including policy, purchase, hardware, software, and training. The consultants are available for phone support as well as visiting the library and installing or otherwise configuring computer systems for participating libraries.

The literature supports resource sharing for small rural public libraries. As these libraries almost always have limited funds, a team effort is needed to create efficiency through technology (Braaten & Schuck, 1993; Kehn, 1996). Kirks (1989) advocated library systems to assist rural libraries effectiveness so “each library does not stand alone, dependent on, and limited by, its own resources, but forms part of a library system organized so that citizens, no matter what the size of their library, can have access to books and information needed for business, studies or personal interests; unity brings strength” (p. 36).

Rural Libraries and Technology

The major issues facing rural libraries today are: (a) lack of staff’s technological experience; (b) lack of trained staff; and (c) financial need (Libraries for the Future, 1995). As technology moves ahead at an increasing rate, rural library staff may find themselves unable to deliver available resources to their patrons, thus perpetuating the downward economic spiral
common to rural areas. The poor in rural areas have less formal education and less access to quality health care (Davis, 1992). The poverty among the rural elderly is twice that of the urban elderly. Rural children may have less exposure to books and computers if their parents must take them any distance to an inadequate library. These are situations libraries can take advantage of by assisting their patrons with provision of information on careers, job skills, and health care (Kirks, 1989).

Dillman (1991) and Henderson (1990) stated that rural libraries must "wake up" to the fact they must become a vital resource within their community to survive and instead of being perceived as repositories, present themselves as access points to the world. However, rural libraries may find this change in perception difficult to achieve as many rural libraries began as women's clubs and reading rooms. To further substantiate this perception, Holt (1995) found that women comprise 70% of rural library users. Holt examined the reasons why some in a community would not use their rural library. These included: (a) patron not sure of what is available; (b) not in the habit of going to the library; (c) physically unable to get to the library, and (d) lack of transportation to get to the library. Holt also determined what users expect from their local library: computerized information, job training information, books on tape, and activities for seniors.

Possible solutions for these issues were scattered throughout the literature. Barron (1995) suggested cooperation and implementation of virtual campuses and distance education through the combined efforts of local libraries, state library agencies, professional associations, and library schools. The first two identified needs previously mentioned, lack of technological experience and lack of trained staff, could be satisfied in this manner. Obviously, however, funding remains an issue in the implementation of Barron's recommendations.
In the state of Kansas, two programs were identified as already implementing Barron’s recommendations of virtual campuses and combined efforts for the provision of training library personnel. The first is the School of Library and Information Management (SLIM) program at Emporia State University. The SLIM program offers ALA-accredited master’s degree classes both in the distance education realm and in the virtual realm. This progressive program’s reach extends past even the state boundaries to include the midwestern and western United States, having extended their distance education programs to Nebraska, Utah, New Mexico, Colorado, and Oregon. Technological capabilities such as interactive television, Internet, and email allow some classes to be completed virtually (Chepesiuk, 1998).

Another program sponsored by the Kansas State Library in cooperation with SLIM is named KPLACE. Solely for non-degreed library staff, this program consists of a week-long training once a year over the course of three years (a total of 90 hours). Instructors are garnered from Emporia State University, the Kansas State Library, and the Kansas library community. Content of this program gives a philosophical basis as well as practical application for provision of library service. The curriculum of KPLACE includes such topics as budgeting, technology, personnel management, trustee development, and training in community information access (Watkins, 1998).

Library Services and Technology Act. One government-sponsored program to meet the funding need for libraries is the Library Services and Technology Act (LSTA) which was enacted by Congress in 1996 as a revision of the Library Services and Construction Act (LSCA). Whereas the LSCA provided funds on a grant basis to libraries for provision of service, the purpose of the LSTA is reflected in its intent to provide funds for the introduction and improvement of the technological infrastructure of libraries. LSTA grants are intended for
purchase of electronic equipment such as computers, facsimile machines, telephones, and automation software and systems.

LSTA federal funds are provided to each state for distribution to libraries on a grant basis. In accordance with LSTA requirements, the Kansas State Library has a written Five-Year State Plan for Library Services in Kansas 1998-2002; in this plan are outlined the State's purpose for the use of LSTA funds. Included in the Plan purpose are: (a) establishing or enhancing electronic linkages among libraries; and (b) helping libraries to acquire information and telecommunication technologies (Kansas State Library, 1997). The Kansas State Library distributes these funds on a grant basis to libraries.

In a letter to the editor published in the Wichita Business Journal (Morgan, 1998), one gentleman laments the inferior capabilities of Kansas to provide even basic, let alone progressive, information by stating "Kansas is a back road off the info super-highway" and the reason is a "miserable" telecommunications infrastructure (Morgan, 1998). In his small rural community, telephone party lines were still available just in the past year. He stated that copper wiring in the town that serves as his county seat is of such poor quality it won't support even the slowest modems. His candid assessment of this state’s telecommunications status was that all previous attempts to encourage rural economic development are sabotaged by an inferior infrastructure.

Federal Universal Service Fund for Schools and Libraries. In the Telecommunications Act of 1996, Congress authorized the Federal Communications Commission to implement a universal service program that makes modern communications services affordable for every K-12 school and public library in the nation, the Federal Universal Service Fund for Schools and Libraries, commonly called the E-Rate program. Under this program, these schools and
libraries are eligible to receive discounts of between 20% and 90% annually toward the costs involved in the provision of Internet access. The discounts vary depending on economic need and location (urban or rural). The level of discount depends on the percentage of students eligible for free and reduced lunches in the public school district in which the library resides (Missouri Research and Education Network, 1997).

Technology Training for Library Staff

Vavrek (1997) stated the deficiencies of rural libraries are abundant. One in twenty library directors in communities with a service population of less than 2,500 have a master's degree in library science. Typically, a small rural public library does not have the financial resources to commit to hiring academically-trained librarians; Vavrek suggests small rural public librarians can consider this technological age an opportunity to gain the skills necessary to make their library competitive and as vital to their community as any large urban library.

In one study conducted by Johnson (1998), the MLS degree was determined to be of value but librarian titles such as Network Manager, Operations Director, and Circulation Supervisor further demonstrated that computer skills and the ability to work with people will be the determinants of successful librarians of the future. Johnson declared that the library profession must recognize and reward those skills needed to ensure the continuing viability of public libraries. Martinez (1997) went further to describe futuristic librarians as "Internauts" or "Cybrarians" and applauded the progressive move the School of Information and Library Studies at the University of Michigan made in the creation of the Internet Public Library (located at www.ipl.org).

In order for any education and training to be effective in rural libraries, the participants in the training program must understand and buy into the need for technology (Burgin &
Constant among change in technology is the need for ongoing development and training of staff who use these systems (Epple et al., 1992). The term "staff development" does imply a change over time, however, which, for the transfer of information to be successful, needs to include a "before" and "after" (Lipow, 1989). Harris (1996) suggested the need for libraries to "paradigm shift" their way to becoming learning organizations, encouraging an environment which caters to personal learning and team sharing, and allowing for effective personnel training.

Attitudes of staff must be considered in training as well. Consideration of the habits and expectations of staff must be addressed. Technology changes how librarians do their jobs. As geographic barriers cease to exist, librarians no longer control the information environment so closely. Much as books were once tightly held in controlled stacks, electronic information has been within the librarian's reach but not the users' reach. By placing computers, online databases, and the Internet into the patron's hands, control of the information environment is shared as well (Larson, 1990).

Training of staff is conducted in order to produce a desired change. Burgin & Smith (1995) reported that businesses and agencies spend $30-50 billion every year in the United States on formal training of staff and another $180 billion on informal, on-the-job training. Training methods vary widely and may include: (a) in-house training programs; (b) training through vendor contract; (c) outside training opportunities such as community college instruction; and (d) self-paced instruction (Tennant, 1995).

The method most endorsed in the literature for staff training is that of "train-the-trainer" (Epple et al., 1992; Garofalo, 1995; Hallmark & Garcia, 1992; Herring & Mackenzie,
This method selects a subgroup of staff who attend training sessions, become fully trained in the system and in training others on the system, and then return to their home library to train other staff. All of the articles reviewed on specific training practices emphasize different learning patterns of technology users but endorse the need for qualified staff in-house to provide ongoing training support to staff. Additionally, Hale (1991) encouraged the preparation of training attendees by giving time to share feelings, expectations, and discussion with others rather than the usual “reporting” back on training received.

Other discussion in the literature regarding training centered around addressing the concerns of library employees when integrating technology. The fear and uncertainty that accompanies change must be recognized in personnel training (Boss, 1984; Nuckolls, 1992). More experienced, yet computer illiterate staff may be resistant to the implementation of technology as they find themselves ignorant in this area and shut out by their younger, more computer-savvy colleagues (Lovecy, 1984). Reynolds (1985) discusses fear versus resentment, stating fears are more easily overcome in resistant staff than any resentment.

Survey Effectiveness

The mailed survey or questionnaire can be a valuable tool in obtaining information from a large population in a geographically dispersed area (Creswell, 1994; Dillman, 1978). Large amounts of data can be collected with ease and at a relatively low cost. Personal interviews are very expensive, and responses can be obtained from people too busy for a personal interview; interviewer bias is eliminated when using a survey (Linsky, 1975). Data interpretation is easy, too, due to the standardization of question and response categories.
In order for a survey to be statistically meaningful, there must be a high response rate, and Babbie (1979) has determined that 50% is the minimum response rate acceptable to assure a representative sample. Specific procedures can be initiated in order to maximize response rates and ensure that a random and representative sample is obtained (Creswell, 1994). Using first-class postage communicates the importance of the correspondence and keeps the respondent from throwing the envelope away before opening it. Emphasizing how important the individual's response is to the project and keeping the survey short and concise will assist in increased response rates (Linsky, 1975). Additionally, response rates can be increased by building sufficient rapport with the respondent (Dillman, 1978). Combining personal devices (making participants feel valued, committed, and appreciated) with a user-friendly format will enhance the return of mailed surveys. High response rates are of no value if the information obtained is not accurate and complete. The respondents must be able to understand the questions being asked on the survey or the answers will be invalid.

According to Sudman (1985), following are listed the four main reasons why professionals do not respond to mailed surveys: (a) the respondent is too busy to complete the survey, (b) the value of the survey is not clear to the respondent, (c) the respondent is concerned about confidentiality of the results, and (d) the survey may appear biased and not allow the respondent the choice of a complete range of answers. Additionally, some professionals are simply non-believers in surveys and feel it is impossible to obtain useful information from any survey.

Summary

The literature review revealed considerable information on library standards. Basis was found for having library standards including economics, as a learning tool for libraries, for
goal setting and as a planning instrument. Kansas public libraries have for their use a standards document issued by the Kansas State Library which defines 'service' levels as well as minimum guidelines for each of those service levels, including the gateway and linking libraries this study examined. These guidelines encompass operations and service, physical facilities, library staff and collections, technological applications, and continuing education of staff.

The regional systems in Kansas are fittingly described in much of the literature which discusses resource sharing among libraries. Articles were found on the necessity of small rural public libraries providing technological information to their patrons in order to be a vital resource to their community. In order to do that, the literature also discussed the need for library staff to be trained in the provision of these technological resources.

For the purposes of this study, survey effectiveness was investigated. Mailed surveys are found to be a cost-effective method of collecting information, and a minimum response rate of 50% is needed to ensure a representative sample.
Chapter 3

Methodology

Overview

This study was conducted using descriptive methodology to ascertain whether public libraries in Kansas serving a population of less than 1,000 meet automation equipment standards and have a computer, a fax, access to online or CD-ROM databases, access to automated ILL and electronic mail as defined in the Measurements of Quality: Public Library Standards for Kansas (1995). It was also conducted to determine whether public libraries in Kansas serving a population of less than 1,000 which are automated meet the personnel training standards as also defined in the Measurements of Quality: Public Library Standards for Kansas (1995). Chapter 3 presents the design of the study, selection of the subjects, protection of subjects’ rights, inclusion and exclusion criteria, limitations, assumptions, procedure, and data collection instrument, and data analysis.

Design of the Study

The study design was non-experimental and non-randomized with descriptive analysis. Data were collected using a mailed survey (see Appendix A) and verbal interviews. This format of data collection has proven to be reliable and cost effective for similar survey-type studies reported in the literature.

Selection of Subjects

Surveys were mailed to all Kansas public libraries that were classified as gateway or linking libraries; in other words, those that have a service population of under 1,000. There were a total of 130 libraries identified as fitting the definition of linking and gateway libraries in the State of Kansas. Of the 130 surveys mailed, 115 (88%) were completed and returned.
during the data collection period. Further interviews were conducted verbally with those libraries returning the survey that noted they had installed an automation system \((n=10)\) to gain information on personnel training. Seven of these ten automated libraries participated in the interview process.

Protection of Subjects' Rights

In order to carry out a research project, permission must be granted from the School of Library and Information Management. Application was made and approval obtained (see Appendix B). Individual names of the libraries and/or the library directors participating in the study were not reported to maintain confidentiality and were instead clustered within their regional library systems for data analysis.

Inclusion and Exclusion Criteria

The following inclusion criteria were used:

Any public library in the State of Kansas serving a population of less than 1,000 as shown in the Kansas Public Library Services 1996 Directory and Statistics

The following exclusion criteria were used:

1. Any public library in the State of Kansas serving a population of more than 1,000 as shown in the Kansas Public Library Services 1996 Directory and Statistics.

2. Any other type of library in the State of Kansas, including academic, special, or state libraries.

Variables

The following measures were obtained and determined if the library staff: (a) had a computer; (b) had access to automated interlibrary loan; (c) had access to CD-ROM and online databases; (d) had a telefax; and (e) had electronic mail.
Limitations

Certain factors were recognized as limitations to this study. These factors included:

1. The potential for a biased response group due to examining only one state.
2. The sample may not represent the larger group.
3. The researcher had no control over whether or not respondents return the survey or would be available for interview due to the limited hours small rural libraries are open and available.
4. The interview process may affect the degree of comfort in offering of information by some subjects.

Assumptions

The assumptions made using a mailed survey were as follows:

1. All respondents answered the questions honestly.
2. The respondents interpreted the questions in the manner they were intended.
3. The respondents were willing and able to provide the described information.
4. The respondents would reply in a timely manner.
5. The response of the sample population was representative of the group as a whole.
6. The statistical data were properly compiled and is assumed to be representative of the sample.

Procedure

The survey was mailed to the 130 public libraries identified as serving a population of less than 1,000 within the State of Kansas. Each survey was accompanied by a cover letter stating the purpose of the study (see Appendix C). A stamped and addressed business reply
envelope for return of the completed survey was provided. Returned surveys were collected for one month from the date of the mailing of the survey.

Data were abstracted from the returned surveys, and libraries were identified that said they had implemented automation. Further interviews were conducted with these libraries.

**Data Collection Instrument**

The survey included nine questions yielding “yes” or “no” answers and addressed the following areas:

1. Library demographic information.
2. Technological capabilities (i.e., computer, fax, email, access to automated ILL and online or CD-ROM databases).
3. Automation system.

The library demographic information (Questions 1, 2 and 3) was used for availability in further contact with those libraries whose catalog was recently (within the past three years) automated. Questions 4-8 specifically addressed those technological capabilities as outlined in the 1995 Kansas Public Library Standards as being required for defined gateway and linking libraries. Question 9 was used to extract and identify those libraries that had recently installed an automation system. Participants were given the opportunity for additional comments in the space provided at the end of the survey (see Appendix D).

The verbal interview questions (see Appendix E) were initiated from an instrument developed by Hallmark and Garcia (1996) in determining the effectiveness of training for automated systems in libraries. Permission was obtained from the authors to utilize some of their questions in this survey. The ten questions were specific to the training methods and procedures used to implement their automation system. The following questions were asked
of the participants: (a) how many and which staff were trained, (b) who conducted the training
and what methods of training were used, (c) suggestions for improvement of the training they
received, (d) what positive comments could be made of the training they received, and
(e) their perception of whether they met the technological standards as defined in the 1995
Kansas Public Library Standards.

Data Analysis

Descriptive measurements in the form of percentages were calculated on each item in
the survey-related technological capabilities as a total as well as by regional system.
Demographic data such as number of paid and volunteer staff members were identified by
measures of central tendency (mean, mode, and range).

Content analysis was used to describe the verbal interviews. Interview quotes from
library directors were used to validate the findings.
Chapter 4

Results

Chapter 4 presents the findings of the data collected and analyzed using descriptive statistics. The purpose of this study was to ascertain if public libraries in Kansas serving a population of less than 1,000 meet the automation equipment and personnel training standards as defined in the Measurements of Quality: Public Library Standards for Kansas (1995).

Statistical Analysis and Evaluation

Of the 130 surveys mailed to public libraries serving populations of less than 1000, 115 surveys were completed and returned within the collection period. Of these 115, 71 were classified as gateway library serving a population of less than 500, and 44 were classified as linking libraries serving a population of 500 to 1000 (see Table 2). Of the 15 libraries not participating in the survey, nine were gateway libraries and six were linking libraries.

Tables 3 and 4 demonstrate the technological capabilities of gateway and linking libraries with Table 3 giving combined results and Table 4 showing the results by separating gateway and linking libraries. Of the 115 surveys completed, the combined results demonstrate that 71% of all libraries responding to the survey had computers, 50% had email, 49% had access to C-ROM/online databases, 36% use automated ILL, 25% had facsimile machines and 9% were automated (see Table 3). The percentages of gateway and linking libraries is separated out on Table 4 resulting in very similar percentages on all reported technological capabilities except in the area of automation.

Regional library systems. Table 5 illustrates the breakdown of the 115 returned surveys by regional system: 21% of the surveys were from the CKLS (n=24); 19% were from
each of SEKLS (n=22) and SCKLS (n=22); 12% were each from SWKLS (n=14) and NCKLS (n=14); 10% were from NWKLS (n=11); and 7% of the surveys were from NEKLS (n=8).

Tables 6 through 11 individually, by library system, address the percentages of libraries meeting the equipment standards. Table 6 gives the percentage of libraries with a computer: 76% in the SCKLS; 55% in the CKLS; 86% in the SWKLS; 29% in the NCKLS; 69% in the NWKLS; 59% in the SEKLS; and 80% of the libraries in the NEKLS had a computer. These figures demonstrate quite a range from 29% of the libraries in the NCKLS to 86% of the libraries in the SWKLS having a computer.

The percentages of libraries which utilize automated ILL is demonstrated on Table 7: 36% in the SCKLS; 31% in the CKLS; 50% in the SWKLS; 12% in the NCKLS; 54% in the NWKLS; 14% in the SEKLS; and 40% of the libraries reporting in the NEKLS.

Table 8 gives the percentages of libraries which report utilizing CD-ROM and/or online databases within each regional system. The percentage figures are as follows: 56% in the SCKLS; 38% in the CKLS; 50% in the SWKLS; 12% in the NCKLS; 69% in the NWKLS; 36% in the SEKLS; and 50% of the libraries in the NEKLS.

The reporting libraries having a facsimile machine is presented on Table 9 by percentages within each regional system. The SCKLS reports 12% of their libraries having a fax; 17% in the CKLS; 57% in the SWKLS; 18% in the NCKLS; 23% in the NWKLS; 18% in the SEKLS; and 30% of the libraries in the NEKLS.

Table 10 illustrates the percentages of reporting libraries within each regional system utilizing electronic mail. There are: 52% in the SCKLS; 41% in the CKLS; 57% in the SWKLS; 18% in the NCKLS; 69% in the NWKLS; 32% in the SEKLS; and 50% of the
libraries in the NEKLS. Again, a wide range is noted from 18% of libraries in the NCKLS system using electronic mail to 69% of libraries in the NWKLS.

The libraries which reported having an automated system are shown on Table 11 by percentages within the regional system. Twelve percent of those libraries are in the SCKLS; 7% in the CKLS; 21% in the SWKLS; 0% in the NCKLS as well as in the NEKLS; 7% in the NWKLS; and 5% in the SEKLS.

Gateway and linking libraries. Tables 12 through 17 exhibit the data from the returned surveys for each equipment standard by type of library, gateway and linking. For those libraries having computers, the figures are 71% of the reporting gateway libraries and 36% of the linking libraries. Thirty percent of gateway libraries report utilizing automated interlibrary loan as do forty-five percent of linking libraries. CD-ROM/online databases are utilized by 44% of gateway libraries and 57% of linking libraries. Eighteen percent of gateway libraries and thirty-six percent of linking libraries report having a facsimile machine; forty-four percent of gateway libraries and 59% of linking libraries say they utilize electronic mail. Of those reporting libraries, 11% of the gateway libraries say they have an automated system as do 5% of linking libraries.

The volunteer and paid staff results are reported on Table 18, showing the mean results: 1.65 for paid staff and 2.24 for volunteer staff. The mode figure for paid staff is one and zero for volunteer staff. Ranges for paid staff are 0-10 and 0-26 for volunteer staff.

Content Analysis of Personal Interviews

From this study, it was not possible to ascertain if the public libraries in Kansas serving a population of less than 1,000 which reported being automated met the personnel training standards as defined in the Measurements of Quality: Public Library Standards for Kansas.
(1995). Of the 115 returned surveys, ten libraries reported having an automated system. Of these ten libraries, seven consented to and participated in verbal interviews. Interviews revealed that actually only three of these seven libraries had their card catalog/circulation automated. There was a misunderstanding interpreting the term “automation system” and the other four interpreted it to mean having a personal computer available in their library. As the remaining libraries did not participate in the interviews, their automation status is unknown. Therefore, determination of the personnel training standards were difficult to ascertain and emphasis was then placed on garnering information of the technological equipment status and meeting those standards for the smallest rural public libraries in Kansas.

Of the library directors interviewed, dialog was used to clarify the term automated system. The following is a statement made by one of the directors who reported having an automated system: “We are a very small library but recently installed a new automation system.” When asked about the system, the director proved quite knowledgeable and eager to share her story of implementation of the system which automated their card catalog and circulation.

One very common statement made within the verbal interviews is the appreciation for the regional system consultants. Comments such as “They were wonderful in assisting with our automation, even coming to our library and helping weed the collection in preparation” and “I didn’t know anything about computers, but they [the system consultant] came and set up the computer completely.” There were no negative statements regarding assistance from the regional systems at all.
Chapter 5

Discussion

This study was conducted to investigate the problems: Do public libraries in Kansas serving a population of less than 1,000 meet automation equipment standards as defined in the *Measurements of Quality: Public Library Standards for Kansas* (1995)? and: Do public libraries in Kansas serving a population of less than 1,000 meet the personnel training standards as defined in the *Measurements of Quality: Public Library Standards for Kansas* (1995)? Chapter 5 presents a discussion of the results, conclusions, implication for provision of services, and recommendations for future research.

Conclusions

**Research Question 1.**

Do public libraries in Kansas serving a population of less than 1,000 meet the automation equipment standards and have a computer, a fax, access to online or CD-ROM databases, automated interlibrary loan and electronic mail as defined in the *Measurements of Quality: Public Library Standards for Kansas* (1995)?

This study found that the small rural public libraries in the State of Kansas did not completely meet the automation equipment standards.

**Computers.** Seventy-one percent of all of the gateway and linking libraries participating in the survey reported having a computer. Although a computer in every household may not be everyone’s dream, computer access needs to become a fundamental right in society. It is becoming too important for most people not to have those skills. By the year 2000, nine out of ten white-collar jobs will require the use of a computer (Dillman, 1991). Libraries can assist in the provision of public computer access.
Analysis of the data was done comparing size of libraries, gateway libraries (serving a population of less than 500) and linking libraries (serving a population of 500-1000) to determine if the very smallest libraries had a higher or lower percentage of computers. It was found, however, that the percentages were almost identical and that size difference was not relevant in which libraries had computers and which did not have computers.

**Automated interlibrary loan.** Of those 115 libraries returning the survey, 36% reported they have access to and use automated interlibrary loan. Considering that 71% of these libraries have computers, it is noteworthy that 35% do not utilize their computer for this service. One could speculate on why the librarians are not using the automated ILL. Are these librarians not trained on the software? Are they merely in the habit of sending ILL through the mail? Do they not utilize this service at all for their patrons? Or even more basic questions: Is their computer capable (i.e., include a modem?); or do they have a telephone line?

**E-mail.** Fifty percent of those libraries returning the survey reported they had access to and utilized email. This figure is 21% below the total of 71% of libraries that have computers but encouraging in that if librarians are comfortable utilizing email, perhaps some education in that area would increase the number of librarians who would make use of their email for ILL purposes.

**CD-ROM or online databases.** Of the 115 libraries, 49% reported having access to either CD-ROM or online databases. This percentage is very similar to that reported on email usage and the same speculations arise: Are the librarians not trained or knowledgeable on what databases are available to them? or is this a service they choose not to offer their patrons and why? It is evident that those who do have and utilize online databases realize its benefits. In the verbal interview of a gateway librarian that had recently installed computers for public
access, the director was excited over the availability of FirstSearch for patrons, saying, "For the many college students that come in, and others, our small library is just as valuable a resource in our community as the Johnson County Library is in theirs."

**Fax.** One noteworthy figure reported was that 25% of all libraries returning the survey had access to fax. Considering the speed in which information can be transferred via fax, one could surmise a need in this area for libraries to address. Henderson (1990) explains that facsimile machines, computers and interlibrary loan make it possible for even the smallest library to pull information from larger and academic libraries. This was evidenced in Utah's rural libraries where one library director explained their system's use of online databases and a fax machine: "We would never be able to buy them ourselves [online databases], but we bought a fax machine and are now able to request an article via the Internet and get it in 20 minutes" (Chepesiuk, 1996).

**Automated systems.** Nine percent of the libraries reported on the survey they had an automated system. However, clarification was found to be needed with the term "automated system". Seven of those ten libraries participated in verbal interviews and in that discourse, it was found that three of those seven believed "automated system" to be any computer installation. The intention of the question was to determine if the card catalog and/or circulation was automated so as to examine the training of the personnel utilizing that system. As only three of the 115 returned surveys were found to have actually automated their card catalog and/or circulation system, personnel training was difficult to assess in only that small sample.
Research Question 2.

Do public libraries in Kansas serving a population of less than 1,000 which are automated meet the personnel training standards as defined in the Measurements of Quality: Public Library Standards for Kansas (1995)?

As only 3 of the 115 reporting libraries were found to have an automated card catalog/circulation, this study was not able to determine if the personnel training standards were met. The verbal interviews of the directors from three libraries were helpful but the sample size was too small to accurately determine if the library staff were meeting the standards.

Personnel training. The 115 surveyed libraries reported a total of 173 paid staff and 322 volunteer staff yielding a combined mean of almost 4 personnel per library. The standards for Kansas public libraries state the need for "computer literate" personnel and these figures demonstrate a total of 495 individuals who are providing library services in the smallest libraries in Kansas. This area is certainly ripe for investigating library personnel training.

Bjorner (1996) declares that no librarian worth the name shies away from technology, that information professionals tend to be leaders in technological implementation. Furthermore, library users are experiencing a world of constant change as well and librarians must be flexible in their response (Hale, 1991). The opportunities to be flexible in the face of change exist for the more than 500 individuals in the smallest rural public libraries in Kansas as well.

Implications

Dillman (1991) suggests that all libraries should be computerized to better serve their patrons but lists the common responses from librarians as to why they are not computerized:
(a) “We don’t have the money”; (b) “Our clientele won’t let us”; and (c) “I don’t have the needed skills.” The first response about lack of money was echoed over and over in the surveys returned in this study (see Appendix D). Grants such as those provided through LSTA can assist with getting computers in libraries, however.

Another reason libraries may not have computers is the fear of technology that staff may have including: (a) the fear of technology replacing books; (b) the fear of making a mistake in the system; and (c) older employees afraid they cannot learn the technology (Lancaster & Sandore, 1997). When demonstrating the need for computers and implementation, the change agent must be encouraging and non-threatening. It must be noted that although this study revealed that 71% of the smallest rural public libraries in Kansas have computer equipment for public use, the librarian may not be trained and thus not able to benefit from that resource.

Facsimile machines can also be obtained via grants. The results of this study demonstrating that only 25% of the reporting libraries having a facsimile machine lend question to the understanding of the need for this resource in the smallest rural public libraries in Kansas. To most of the reporting libraries, a fax may seem a luxury but when used for reference services, it is a valuable resource for small rural libraries.

Electronic mail also gives opportunity for timely information to be transmitted. This study’s results demonstrated that 71% of reporting libraries had a computer yet only 50% of those libraries utilized electronic mail. This comparison of figures raises the question of why 21% of those libraries with computer are not employing the use of electronic mail.

The same question applies to the results of this study revealing that of the 71% reporting libraries with a computer, only 36% utilize the automated interlibrary loan. Answers
to this question could possibly range from lack of knowledge of how to ILL via the computer
to a problem as basic as no telephone connection or modem for their computer.

As with CD-ROM/online databases, it was evident in the comments through the
interviews that librarians were either familiar or not familiar with this resource. For any type of
reference or research, journal articles provide the most current information in the most
economical way. Online databases such as FirstSearch and Search Bank have thousands of
journal articles available in full text, and libraries could not individually afford the purchase of
these. Cooperative efforts such as those through the Kansas State Library can, and do,
provide this opportunity.

This study demonstrated that 9% of the gateway and linking libraries in Kansas were
automated. It is obvious that not every library can afford the high costs associated with
automating their card catalog/circulation system. However, LSTA grants do provide matching
funds for retrospective conversion as well as for automation, and this goal could be
accomplished with diligence over time. Taking this a step further, however, funds may be
available through grants to obtain automation for a library but another hurdle may be found:
personnel must understand how to write grants to obtain the equipment. The provision of
grant-writing workshops to these small rural libraries is necessary, and the regional systems in
Kansas are conducting those workshops in the fall of 1998 to meet that need (Bird, 1998).

The funds to conduct such workshops are based on political decisions and library
directors must be aware of this possible difficulty in obtaining the resources they need.
Governmental agencies and elected officials may not understand or support the need for funds
to small rural public libraries. One comment from a director during the verbal interview was
that in talking with her state representative, he did not understand why her small library would
want or need online databases. Even after explaining the need to him, he was unsupportive in that so few people were served with what he felt was a significant amount of money.

In examining the number of paid and volunteer staff, a total of more than 500 people are reportedly involved in the provision of library services in rural Kansas. It might be interesting to know how many hours volunteers provide within these libraries and instead of counting the number of volunteers, a more accurate count would be the number of volunteer hours provided annually. The smallest libraries have an average of 1.5 paid staff and truly exist on the generosity of volunteers.

Recommendations for Further Research

This study provides many exciting, and in some cases surprising results and opens up further discussion on the current status of small rural public libraries in Kansas. The myriad challenges facing small, underfunded public libraries in Kansas is evidenced by the vast majority of libraries who have found it difficult to meet the standards of automated equipment and personnel training.

The intent at the beginning of the research period was to examine the personnel training standards as well as the equipment standards for the gateway and linking libraries in the State of Kansas. However, the difficulty in transmitting the meaning of the term “automation system” provided less opportunity to examine that area of the standards. If this study were conducted again with a clearer understanding of that term within the survey, perhaps a more accurate rendering of the status of card catalog/circulation automation could have been determined and the personnel training standards then examined.

The information gathered and presented by the regional system is noteworthy in the comparisons of the libraries which have computers, utilize electronic mail, automated
interlibrary loan and CD-ROM/online databases, have a facsimile machine, and which are automated. In each of these equipment standards, the libraries in the SWKLS demonstrated the highest compliance rates. In comparison, the reporting libraries in the NCKLS uniformly revealed the lowest percentages in each of the equipment standards examined.

Some suggestions for further research include:

1. An examination of the new 1999 Standards for Public Libraries could be made to determine any changes in the automation equipment and personnel training standards and this same study replicated using those new recommendations.

2. An examination needs to be completed by each of the regional systems to determine areas of concern and possible improvement.

3. A further examination of those small rural public libraries who do not have automated equipment is recommended. One could question whether it is an issue of funds in particular or whether the library director and/or board understand/support the need for automated equipment/computers in their library or is that automation even needed at all for the smallest rural public library?

4. Further study could be conducted on those small rural public libraries that do meet some areas of the Public Library Standards and examine what factors have made them successful in meeting those standards.

5. Qualitative research is needed to examine the experience of those libraries who have successfully automated systems and identify any problems with the implementation.

Cisler (1995) makes a powerful statement in saying that the health of libraries is tied to the communities they serve. Viable, progressive libraries will be those who become involved
in planning for the provision of information services for their communities. Library directors must find what their community needs are and find ways to meet them.

Summary

This study examined public libraries in the State of Kansas only and found there was difficulty for small libraries in complying with the standards related to automation equipment and personnel training which does demonstrate the standards are set at a very good level for self monitoring. Library directors and boards have the opportunity to evaluate their own situations and compare where they meet, or do not meet, the public library standards. The data from this study can be used in a multiplicity of ways, be it examination of the individual libraries, the regional systems, or the standards themselves. It is also evident there are many strengths within the smallest libraries in Kansas and library directors can build on these to improve their own library services.

Houlahon (1991) gives a somewhat humorous yet accurate description of why some rural libraries are prevented from succeeding in meeting the information needs of their patrons, small-mouth disease: "Every time they open their mouths, they say, 'We can't do that because we are too small.'" It is the hope of this author that small rural public libraries in Kansas will find the opportunities available to them, regardless of their size, and take advantage of those opportunities to provide the most effective library services to the citizens of Kansas.
References


Table 1. Levels of Service for Kansas Public Libraries

<table>
<thead>
<tr>
<th></th>
<th>Population Served</th>
<th>Minimum Hours Open</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gateway</td>
<td>Fewer than 500 people</td>
<td>15-20 hours/week</td>
</tr>
<tr>
<td>Linking</td>
<td>500-1,000 people</td>
<td>15-25 hours/week</td>
</tr>
<tr>
<td>Service Center</td>
<td>1,000-2,500 people</td>
<td>20-40 hours/week</td>
</tr>
<tr>
<td>Major Service Center I</td>
<td>2,500-10,000 people</td>
<td>35-60 hours/week</td>
</tr>
<tr>
<td>Major Service Center II</td>
<td>10,000-25,000 people</td>
<td>55-75 hours/week</td>
</tr>
<tr>
<td>Major Resource Center I</td>
<td>25,000-100,000 people</td>
<td>68-75 hours/week</td>
</tr>
<tr>
<td>Major Resource Center II</td>
<td>over 100,000 people</td>
<td>68-75 hours/week</td>
</tr>
</tbody>
</table>
Table 2. Percentage of Gateway libraries (serving population of less than 500) and linking libraries (serving population of 500-1000) in the total sample.
Table 3. Combined percentage of Gateway and Linking libraries in Kansas (serving populations less than 1000) having computers, utilizing automated interlibrary loan, CD-ROM/online databases, facsimile machine, electronic mail, and automation systems.
Table 4. Percentage of reporting libraries separated by library type (Gateway and Linking) with computers, utilizing automated interlibrary loan, CD-ROM/online databases, facsimile machine, electronic mail, and automation systems.
Table 5. Distribution of libraries in the sample by regional library system.

<table>
<thead>
<tr>
<th>Regional Library System</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCKLS</td>
<td>19%</td>
</tr>
<tr>
<td>NEKLS</td>
<td>7%</td>
</tr>
<tr>
<td>SEKLS</td>
<td>18%</td>
</tr>
<tr>
<td>NCKLS</td>
<td>12%</td>
</tr>
<tr>
<td>NWKLS</td>
<td>10%</td>
</tr>
<tr>
<td>CKLS</td>
<td>20%</td>
</tr>
<tr>
<td>SWKLS</td>
<td>14%</td>
</tr>
</tbody>
</table>
Table 6. Percentage of libraries having a computer within each regional system in Kansas.

<table>
<thead>
<tr>
<th>Regional System</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCKLS</td>
<td>76%</td>
</tr>
<tr>
<td>CKLS</td>
<td>55%</td>
</tr>
<tr>
<td>SWKLS</td>
<td>86%</td>
</tr>
<tr>
<td>NCKLS</td>
<td>69%</td>
</tr>
<tr>
<td>NWKLS</td>
<td>59%</td>
</tr>
<tr>
<td>SEKLS</td>
<td>80%</td>
</tr>
<tr>
<td>NEKLS</td>
<td></td>
</tr>
</tbody>
</table>

Note:
- SCKLS (total of 25 libraries, 22 returns)
- CKLS (total of 29 libraries, 24 returns)
- SWKLS (total of 14 libraries, 14 returns)
- NCKLS (total of 17 libraries, 14 returns)
- NWKLS (total of 13 libraries, 11 returns)
- SEKLS (total of 22 libraries, 22 returns)
- NEKLS (total of 10 libraries, 8 returns)
Table 7. Percentage of libraries utilizing automated interlibrary loan within each regional system in Kansas.

Note:
SCKLS  (total of 25 libraries, 22 returns)
CKLS   (total of 29 libraries, 24 returns)
SWKLS  (total of 14 libraries, 14 returns)
NCKLS  (total of 17 libraries, 14 returns)
NWKLS  (total of 13 libraries, 11 returns)
SEKLS  (total of 22 libraries, 22 returns)
NEKLS  (total of 10 libraries, 8 returns)
Table 8. Percentage of libraries utilizing CD-ROM/online databases within each regional system in Kansas.

Note:
SCKLS  (total of 25 libraries, 22 returns)
CKLS   (total of 29 libraries, 24 returns)
SWKLS  (total of 14 libraries, 14 returns)
NCKLS  (total of 17 libraries, 14 returns)
NWKLS  (total of 13 libraries, 11 returns)
SEKLS  (total of 22 libraries, 22 returns)
NEKLS  (total of 10 libraries, 8 returns)
Table 9. Percentage of libraries having a facsimile machine within each regional system in Kansas.

Note:
SCKLS  (total of 25 libraries, 22 returns)
CKLS   (total of 29 libraries, 24 returns)
SWKLS  (total of 14 libraries, 14 returns)
NCKLS  (total of 17 libraries, 14 returns)
NWKLS  (total of 13 libraries, 11 returns)
SEKLS  (total of 22 libraries, 22 returns)
NEKLS  (total of 10 libraries, 8 returns)
Table 10. Percentage of libraries utilizing electronic mail within each regional system in Kansas.

Note:
- SCKLS (total of 25 libraries, 22 returns)
- CKLS (total of 29 libraries, 24 returns)
- SWKLS (total of 14 libraries, 14 returns)
- NCKLS (total of 17 libraries, 14 returns)
- NWKLS (total of 13 libraries, 11 returns)
- SEKLS (total of 22 libraries, 22 returns)
- NEKLS (total of 10 libraries, 8 returns)
Table 11. Percentage of libraries having an automated system within each regional system in Kansas.

Note:
SCKLS  (total of 25 libraries, 22 returns)
CKLS   (total of 29 libraries, 24 returns)
SWKLS  (total of 14 libraries, 14 returns)
NCKLS  (total of 17 libraries, 14 returns)
NWKLS  (total of 13 libraries, 11 returns)
SEKLS  (total of 22 libraries, 22 returns)
NEKLS  (total of 10 libraries, 8 returns)
Table 12. Percentages of reporting libraries having a computer within each library type (Gateway and Linking) in Kansas.

<table>
<thead>
<tr>
<th></th>
<th>Gateway Libraries (n=71)</th>
<th>Linking Libraries (n=44)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent</td>
<td>71</td>
<td>36</td>
</tr>
</tbody>
</table>

\( \% \)
Table 13. Percentages of reporting libraries utilizing automated interlibrary loan within each library type (Gateway and Linking) in Kansas.
Table 14. Percentages of reporting libraries utilizing CD-ROM/online databases within each library type (Gateway and Linking) in Kansas.

<table>
<thead>
<tr>
<th></th>
<th>Gateway Libraries (n=71)</th>
<th>Linking Libraries (n=44)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>44</td>
<td>57</td>
</tr>
</tbody>
</table>

Exhibit: Bar chart showing the percentage of Gateway and Linking libraries utilizing CD-ROM/online databases.
Table 15. Percentages of reporting libraries having a facsimile machine within each library type (Gateway and Linking) in Kansas.

<table>
<thead>
<tr>
<th>%</th>
<th>Gateway Libraries (n=71)</th>
<th>Linking Libraries (n=44)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td></td>
<td>36</td>
</tr>
</tbody>
</table>

The table shows the percentages of reporting libraries having a facsimile machine within each library type (Gateway and Linking) in Kansas.
Table 16. Percentages of reporting libraries utilizing electronic mail within each library type (Gateway and Linking) in Kansas.
Table 17. Percentages of reporting libraries having an automated system within each library type (Gateway and Linking) in Kansas.
Table 18. Central tendencies for paid and volunteer staff in the total sample of public libraries serving a population of less than 1000 in the State of Kansas.

<table>
<thead>
<tr>
<th>Staff</th>
<th>n</th>
<th>mean</th>
<th>mode</th>
<th>range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paid</td>
<td>173</td>
<td>1.65*</td>
<td>1</td>
<td>0-10</td>
</tr>
<tr>
<td>Volunteer</td>
<td>322</td>
<td>2.24**</td>
<td>0</td>
<td>0-26</td>
</tr>
</tbody>
</table>

* Outliers omitted (6, 10) from mean paid staff.
** Outliers omitted (16, 17, 18, 23, 26) from mean volunteer staff.
Appendix A
Survey
Survey

Library Name and Address:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

1. Number of paid library staff

2. Number of volunteer staff

3. Which regional system is this library in?
   SEKLS    NEKLS    CKLS    NCKLS    SCKLS
   NWKLS    SWKLS    Not a System Participant

Does this library have:

4. Computer(s)?
   Yes    No

5. Automated ILL (either CD-ROM or online)?
   Yes    No

6. Access to CD-ROM and online databases?
   Yes    No

7. Fax?
   Yes    No

8. E-mail access?
   Yes    No

9. Was this library’s circulation automated within the past three (3) years?
   Yes    No

Additional information about this library’s automation system or electronic capabilities and/or any Comments:

________________________________________________________________________

________________________________________________________________________

Thank you for your participation. A stamped, addressed envelope is enclosed for the return of this survey to:
Cheryl A. Noble, Rt. 1, Box 3233, Darlington, MO 64438
Appendix B
Letter of Approval for Study
Application for Approval to Use Human Subjects

This application should be submitted, along with the Informed Consent Document, to the Institutional Review Board for Treatment of Human Subjects, Research, and Grants Center, Plumb Hall 313F, Campus Box 4003.

1. Name of Principal Investigator(s) Individual(s) administering the procedures:  
   Cheryl A. Noble, graduate student

2. Departmental Affiliation:  
   School of Library and Information Management

3. Person to whom notification should be sent:  
   Cheryl A. Noble  
   Address: Route 1, Box 3233  
   Telephone: Darlington, MO 64438 (660) 666-2845

4. Title of Project:  
   An Investigation and Evaluation of Standards for Small Rural Public Libraries in the State of Kansas

5. Funding Agency (if applicable):  
   None

6. Project purpose(s):  
   Thesis research

7. Describe the proposed subjects: (age, sex, race, or other special characteristics, such as students in a specific class, etc.  
   Library directors in small rural public libraries in the State of Kansas

8. Describe how the subjects are to be selected:  
   The subjects will include those librarians from libraries in the State of Kansas serving a population base of less than 1,000.

9. Describe the proposed procedures in the project. Any proposed experimental activities that are included in evaluation, research, development, demonstration, instruction, study, treatments, debriefing, questionnaires, and similar projects must be described here. (Copies of questionnaires, survey instruments, or tests should be attached). (Use additional page if necessary).  
   Surveys with an explanatory letter (see attached Exhibits A & B) will be mailed to librarians in small rural public libraries in the State of Kansas. A random sample will be selected from the returned questionnaires for more in-depth interviewing via personal visit, telephone, or electronic mail. Results of this data collection will then be reported.
10. Will questionnaires, tests, or related research instruments not explained in question #9 be used?  
   _____ Yes _____ No (If yes, attach a copy to this application)

11. Will electrical or mechanical devices be used?   _____ Yes _____ No (If yes, attach a detailed description of the device(s)).

12. Do the benefits of the research outweigh the risks to human subjects?   
   X Yes _____ No   This information should be outlined here.  
   No risk to human subjects is anticipated

13. Are there any possible emergencies which might arise in utilization of human subjects in this project? 
   _____ Yes _____ No   Details of these emergencies should be provided here.

14. What provisions will you take for keeping research data private?  
   Mailed surveys will request general demographic information which will remain confidential.  
   Signed informed consent (see attached Exhibit C) will be obtained from interviewed subjects. In reporting results, specific identifying information will not be used.

15. Attach a copy of the informed consent document, as it will be used for your subjects.  
   See attached Exhibit C

STATEMENT OF AGREEMENT: I have acquainted myself with the Federal Regulations and University policy regarding the use of human subjects in research and related activities and will conduct this project in accordance with those requirements. Any changes in procedures will be cleared through the Institutional Review Board for Treatment of Human Subjects.

[Signature]  
Signature of Principal Investigator  
[Date]

[Signature]
Facility Advisor/Instructor on Project  
[Date]
Appendix C
Cover Letter
January 5, 1998

Hello..

My name is Cheryl Noble, and I am a graduate student at the School of Library and Information Management, Emporia State University. I am working on my thesis and am gathering information in order to be able to write about small rural public libraries in the State of Kansas.

Enclosed is a survey with a few questions regarding your library as well as an addressed, stamped envelope. I would appreciate your taking the time to complete the survey and return it to me by January 31, 1998.

Your assistance in this project is sincerely appreciated.

Thank you,

Cheryl A. Noble
Graduate Student, SLIM
Emporia State University

Enclosures
Appendix D
Additional Comments from Returned Surveys

• “We don’t even have a phone!”
• “We are a small library in a small town with a population of 300. We cannot justify computerizing our library.”
• “Our total population is 325. We are open only 10 hours a week. Our total operating budget is between $5000-$7000 depending on donations and grants. We have not been able to afford a computer or an automation system; however, we are exploring possible donations or grants for the purchase of a computer. Then we will have to find money to maintain it. This is not easy in a small rural area that is only 10 miles from a large library with computers and schools that have community access to computers. Our main purpose is to provide books for recreational reading.”
• “The online access is a lifesaver for this small library. We have access now to things we would have been able to receive but with a lengthy time frame. It also speeds up our ILL requests.”
• “Space, finances, and personnel need to be evaluated before automation is ever considered.”
• “We are a small library in a town of 420 so have a limited budget. Our computers were purchased with grants or we wouldn’t have them.”
• “The library has free internet access through our telephone company. We also have written our own web pages for the library and community.”
• “We have web/internet access and provide patrons free internet usage.”
• “Are working to go on-line”
• “We are working to be fully automated this year if we can get a grant or if we can afford it.”
• “Automated in 1991. In process of updating with new comp. Old comp will be available with encyclopedia for patron use.”
• “We are an extremely small library and funds are very limited.”
• “Our library serves a town with the population of 369. We operate on a very limited budget so it is not feasible to have an automation system”
• “Our little library is run solely on volunteer help. We were one of the first libraries online in northwest KS and we are growing!”
• “The cost to automate is more than our annual budget; probably never will be. Our library is in a small town of 405 souls...our yearly budget is $6,000...we are open 16 hours per week.”
• “The computer has a fax I can use but haven’t been taught how.”
• “We just got it in (the computer), we don’t know much about it yet.”
• “We are a new library, started in 1990 and opened to the public 1995; we have been automated from the beginning.”
• “We have the past 21 years of our local newspaper on CD-ROM and computer for patron use to search it and the internet.”
• “No money for computer etc.”
“We have one computer; internet access; used by staff and public. Have not automated our collection or circulation. One of 2 libraries in the state that is totally volunteer.”

“We just have one PC for the staff’s use.”

“We do have internet access.”

“... library has had a computer for several years that we use basically to keep track of the books we have in the library. This is the first year we will have a computer that will be linked up to internet and that has a CD-ROM.”

“We are a town of 468 people. Very small limited budget.”

“We plan on automating by the year 2000.”

“... have copy machine and microfilm machine.”

“Our computer has fax & email on it but there is a mechanical problem right now.”

“We just received our computer last fall and we are still learning.”

“We’d like the requirements for small, small libraries to be less than 99’s proposed.”

“Small library not automated and will never see it. Very low funded.”

“Would like to automate books.”

“Outdated computer.”

“We are not computerized and don’t have money coming in to ever be. We are a small town of 50 people and not very many coming in. We operated good until the minimum wage came into effect. Now we can’t get enough money coming in to meet the amount going out for expenses. Good luck to you; I have 4 children, all college graduates, so education is very important.”

“We hope to have a computer in time. We are a very busy little library; have summer reading for children average 250-400 book circulation a month; have a copy machine and do copies for our customers; anything else I can help you with, let me know!”

“We have 1 computer with access to the Internet. Good luck on your thesis.”

“We are in the process of building a new library. When this is finished, we will have a computer.”

“Our library is small. Small budget. 290 population. Can’t afford to automate.”

“Housed in an old birch school house (1882). We cater to children and nursing home residents also grades K-6 come here every other Friday. Small town less than 300. We were 25 years old this year... not very modern but a great place for the children.”

“We have one computer for library staff use... not online yet.”

“We are working toward automation—hopefully by the year 2000 we will be up and running.”

“We are very small but someday hope to be automated.”

“Have microfilm reader/printer. City of less than 1,000—nearly 400 patrons—approximately 7,000 volumes and 100 or less videos. Good small town library.”

“Have Winnebago... couldn’t operate without computers anymore! We bought retrospective database. Up front was a big expense—but it was worth it! It would be much too expensive to do it ourselves!”

“We are automating the card catalog. Circulation is to follow that. Two of our staff are 15 hours or less per week. Janitorial is 5 hours per week.”

“We have been able to do the computers and internet because of donations.”

“Fax is shared with city.”
• "Computer available to staff only—our files are on computer—access to Internet for search. In process of changing. Computer really too new to be used for all its possibilities."
• "To have all or at least some of the above is the goal of this library in the near future. Getting the computer was a big project and it is taking time to implement the rest."
• "This library is open 12 hours a week and we do have a computer and yes we want to make our library automated but we have to get a computer that does that which we are trying to do."
• "This library building is so old that the wiring would not handle a computer. We are working toward getting a new library on the ground floor in a new building that is capable of computers."
Appendix E
Interview Questions
In-depth interview questions:

1. How many and which staff were trained?
2. Who conducted the training?
3. How long did the actual training take (in number of days, hours per day)?
4. Was training conducted before, during, or after the automation system was installed?
5. Where was training conducted?
6. What training methods were used?
7. Was support available following the installation of the system? Did you find continued support helpful?
8. What suggestions do you have that could have improved the training you received?
9. What positive comments do you have about the training you received?
10. The standards set by the Ks state:
    Gateway and Linking Library training standards: p. 53 of standards
    - computer literate
    - trained to provide direct access to automated ILL on CD-ROM and online
    - access to CD-ROM and online databases
    - telefax
    - electronic mail
    In your own opinion, do you feel you currently meet those standards? Yes No

Comments

Using Likert scale of 1 - 10, one being least effective, 10 most effective, rate the overall effectiveness of the training you received
I, Cheryl A. Noble, hereby submit this thesis to Emporia State University as partial fulfillment of the requirements for an advanced degree. I agree that the Library of the University may make it available to use in accordance with its regulations governing materials of this type. I further agree that quoting, photocopying, or other reproduction of this document is allowed for private study, scholarship (including teaching) and research purposes of a nonprofit nature. No copying which involves potential financial gain will be allowed without written permission of the author.

Cheryl A. Noble
Signature of Author

April 22, 1999
Date

An Investigation and Evaluation of Personnel Training and Standards for Small Rural Public Libraries in the State of Kansas
Title of Thesis

Cheryl Noble
Signature of Graduate Office Staff

May 20, 1999
Date Received