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Directional, identification, and orientation signage in eight southern New Jersey public libraries

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DIRECTIONAL, IDENTIFICATION, AND ORIENTATION SIGNAGE IN EIGHT
SOUTHERN NEW JERSEY PUBLIC LIBRARIES

by
Rachel Simmons

A Thesis

Submitted in partial fulfillment of the requirements of the
Master of Arts Degree
of
The Graduate School
at
Rowan University
May 2005

Approved by
Professor

Date Approved_____May 15, 2005

ABSTRACT

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DIRECTIONAL, IDENTIFICATION, AND ORIENTATION SIGNAGE
IN EIGHT SOUTHERN NEW JERSEY PUBLIC LIBRARIES
2004/05
Dr. Marilyn Shontz
Master of Arts in School and Public Librarianship

The purpose of this study was to unobtrusively observe eight Southern New Jersey public libraries in eight different counties to discover if they were practicing the principles of good signage for the benefit of their patrons. A checklist of good signage criteria and ADA requirements was created and used to assess the libraries' signs. Principles of good signage and ADA signage came from prior studies. Using SPSS, frequency tables were generated for each question to show the signage percentages for the libraries in the study. The eight public libraries in the study rated well in the areas of signage design (typeface, spacing of letters, contrast, use of symbols, and color combinations), sign size, sequence and self-service, lighting, readability, effective and positive text, flexibility, and non-glare. Most libraries had at least one directory and signs to announce events taking place in the library. The libraries have poor signage issues, especially in signage consistency and ADA signage requirements. There was a lack of directional and identification signage, which may cause some patrons to ask repetitive directional questions.

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CHAPTER ONE

INTRODUCTION

Statement of the Problem

Many public library patrons do not find what they need by themselves, especially

new patrons. Patrons typically stop at an information or reference desk to ask a simple

directional question requiring a one-word answer. In her study, Massey-Burzio (1998)

discovered that "One third of the questions asked at the Information Desk were

directional which seemed too high" (¶ 27). If library patrons are asking many of the

same directional or orientation questions, then there is a lack of clarity as to where certain

essential resources and services are located. Better signage in public libraries can help

reduce this problem.

Significance of the Topic

Signage is important to any public library patron. In their article "Where do I go

from here?" Kinder and Eckman (1993) stated that, "A good signage system is one of the

most important elements involved in promoting user satisfaction in any building open to

the public. Signage is the first thing most people will seek upon entering a building,

especially an unfamiliar one" (p.79). If patrons enter a library for the first time and they

cannot locate what they are looking for, they may have negative opinions of the library.

Patrons may think that it is difficult to use the library, although it is just a lack of

direction or orientation to the surroundings. Well-designed, constructed, and placed signs

can make the difference between a successful and unsuccessful library visit.

After examining the library at Indiana University Northwest, Bosman and Rusinek (1997) discovered a lack of, or poor signage throughout the building. They hypothesized that, "Improved signage might alleviate patrons anxiety by helping them feel more oriented [and] proper signage could lower directional questions" (p.73). Their preliminary survey results included comments given by the students and faculty at Indiana University Northwest. "'It's difficult to figure out what floor to go to; I usually have to ask'. 'Easy to find floor but takes some time to find exact areas because of small printing'" (p. 76). Although Bosman and Rusinek's signage project was only marginally successful, the project accomplished several goals. "Specifically, comments provided the project directors an opportunity to study the library from the user's perspective and helped define and correct problem areas" (p. 81). While certain signage problem areas exist in every library, library employees can act and follow guidelines and procedures on good signage techniques to remedy problems.

<div align="center">Purpose of the Study</div>

The purpose of this study was to discover if selected public libraries in eight Southern New Jersey counties were practicing the principles of good signage for the benefit of their patrons. Eight public libraries in Southern New Jersey were observed for signage practices. A checklist of good signage criteria and ADA requirements was created and used to assess the libraries' signs used for direction, identification, and orientation. General principles on good signage and ADA requirements used for the checklist came from prior studies.

Research Questions

Questions that guided this study were the following:

1. Through observation, what good signage criteria were eight public libraries using in eight Southern New Jersey counties?

2. What changes were needed to improve the signage used for direction, identification, and orientation in the observed Southern New Jersey public libraries?

Definitions of Important Terms

Americans with Disabilities Act (ADA)- "Legislation passed by Congress in 1990 guaranteeing right of access to public facilities and resources to persons with physical disabilities and prohibiting discrimination against them in employment. The *ADA* has had a profound effect on the delivery of library services in the United States, from architectural planning (ramps, elevators, automatic door-openers, signage in Braille, etc.) to the design and placement of furniture, equipment, and shelving and even the design of computer interfaces" (Reitz, 2004).

Central library- "The administrative center of a library system where system-wide management decisions are made, centralized technical processing is conducted, and principal collections are located. Synonymous with *main library*" (Reitz, 2004).

Directional sign- "Directs users to resources as efficiently as possible. It is placed at decision points on major routes" (Ragsdale and Kenney, 1995, p. 86).

"Good" signage- For the purposes of this study, "good" signage is interior signage that meets the criteria of the checklist for this study. "Signage is ADA compliant. It is brief, clear, and direct. It matches the building design and color scheme; it is visible, relevant, and consistent throughout the building. It is easy to change/adapt. It is vandal proof,

directional, legible with upper/lowercase lettering, and professional" (Sannwald, 2001, p. 73-75).

Grade 2 Braille- "The Braille alphabet is made up of one cell for each letter of the alphabet. Each cell can have up to six dots, resembling a domino. A set of 189 abbreviations and contractions are used in Braille for common words and word endings. This abbreviated version of the language is called grade 2 Braille" (Johnson, 1996, p. 49).

Identification sign- "Identifies resources so that they are immediately recognizable such as major areas and service points, individual rooms, and parts of the library collection" (Ragsdale and Kenney, 1995, p. 86).

Orientation sign- "Orients users to the resources available in the building such as a main lobby directory or floor directory" (Ragsdale and Kenney, 1995, p. 86).

Patron- "Any person who uses the resources and services of a library, not necessarily a registered borrower. Synonymous with *user*" (Reitz, 2004).

"Poor" signage- Signage that is "poor" does not meet the criteria of the checklist for this study.

Public library- "A library or library system that provides unrestricted access to library resources and services free of charge to *all* the residents of a given community, district, or geographic region, supported wholly or in part by public funds. Because public libraries have a broader mandate than academic libraries and most special libraries, they must develop their collections to reflect diversity" (Reitz, 2004)

User-friendly library- "A user-friendly library anticipates and reacts to users' needs for easy and convenient access to the library's collections, resources, and services" (Bosman & Rusinek, 1997, p. 72).

Signage- "A collective term for all the static visual symbols and devices posted in a library to direct patrons to specific resources, services, and facilities and to inform them of library hours, policies, programs, and events, including their size, design, and placement. Signs that are clear, concise, consistent, courteous, and appropriately placed can significantly reduce the number of directional questions received at the reference desk and make using the library less stressful, especially for inexperienced patrons. To comply with ADA requirements, many libraries in the United States have added Braille to signs posted within physical reach of users. In libraries that serve a significant number of non-English-speaking patrons, signs may be provided in more than one language. An effort is made in new construction and major renovations to avoid a piecemeal approach by incorporating the style and placement of signs into overall interior design." (Reitz, 2004)

Southern New Jersey- Consists of the southern eight counties of New Jersey (Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Ocean, Salem). Also known as South Jersey.

<center>Assumptions and Limitations</center>

It was assumed that library patrons had difficulty finding essential departments and services because of poor signage. The checklist pre-test results supported the assumption that signage in this study on Southern New Jersey public libraries was poor. The study was limited geographically to eight public libraries in eight Southern New Jersey counties and limited to interior signage.

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CHAPTER TWO

LITERATURE REVIEW

Introduction

Effective signage is an important aspect in any public institution. Staff members and patrons need good signage to direct and orient them to important resources and services in the building. In her article entitled "Signs of the times", Sommerhoff (1999) stated that "Signage [has] an undeniable value whether creating corporate identity, relaying messages to staff and visitors, or facilitating wayfinding" (¶ 1). Public libraries and signage is an important issue since signage is beneficial to the success of any library user. "The signs in a library building set the stage for a friendly or a hostile environment, for a helpful or a confusing library visit, especially for first-time users" (Ragsdale & Kenney, 1995, p. 1). Library users need to feel confident and secure about where to find resources and services. Beck (1996) stated in her research that, "Library buildings are designed to be used, and use obviously implies traffic. One of the essential characteristics of a functional building is the accessibility of all parts with a minimum of effort" (p. 27). Users of a public library should be able to find departments and services easily and with little effort. They should be able to do this without asking for help from library staff.

Conceptual Framework

Library Users and Signage

Good signage can make a public library user-friendly. In their article entitled "Where do I go from here?" Kinder and Eckman (February 1993) stated, "A good signage system is one of the most important elements involved in promoting user satisfaction in any building open to the public" (p. 79). Upon entering a library for the first time, users may feel disoriented and lost if there is no directional or orienting signage available. This is especially true if the building is more than one story. In her column of opinion entitled "Library Instruction", Kirkendall (1977) included an opinion about library signage and how it can help patrons use the library effectively.

> We all know that a library, particularly a large library, can be a confusing and intimidating place. It is crucial that the essential parts of the library—service points, catalogs, stack areas—be clearly and understandably labeled and that a supporting system of directional signs and building directories enable the user to get from one point to another with minimum confusion and maximum confidence (p. 288-289).

According to the research completed by Bosman and Rusinek, (1997) in an academic library, "a user-friendly library anticipates and reacts to users' needs for easy and convenient access to the library's collections, resources and services" (p. 72). From a user-friendly perspective, good signage may remedy patron anxiety, lower directional questions, promote safety, and create an aesthetically pleasing library environment (p. 73). To promote a user-friendly library through good signage, good signage techniques and criteria must be followed and implemented in the library facility.

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Implementing good signage in a public library requires an assessment of the library facility. Library staff must begin by deciding what signage is needed and where it should be placed. Previous studies gave some general guidelines for good signage. To begin, Beck's study (1996) on wayfinding in libraries discussed the premise that "it is a good idea to walk through the building and try to experience it from the user's perspective. Input from staff concerning user behavior is important" (p. 29). Beck maintained that it was important to discover the library users' traffic patterns and questions. Once discovered, signs can be placed strategically. According to Eaton's study (1991) called "Wayfinding in the Library: Book Searches and Route Uncertainty", "Signs should be used strategically to limit the amount of information which the user must process" (p. 526). While Eaton stated it was tempting to place a sign for every question asked by library users, too many signs with too much information can be overwhelming; patrons will not read them. "Directional and locational signs should be salient, simple, and strategically placed" (p. 526). Library users should be able to read signs and keep walking to their destinations. Johnson (1993) reported in her study "that people will usually spend no more than eight seconds reading a message. They prefer to absorb a message and act on it while moving" (p. 40). She concluded that the fewer the words on a sign the better.

Ragsdale & Kenney's (1995) study on effective library signage involved a survey sent to 119 Association of Research Library members. They received 80 responses to their library signage survey. The questions involved different aspects and criteria for a library signage system. "Upper and lower case letters are combined for signs in nearly

two-thirds of the responding libraries. A white background with black letters is considered the most effective. However, many consider a dark background with lighter letters to be more visible" (Ragsdale & Kenney, 1995, p. 1). Ragsdale & Kenney concluded that sign visibility was based upon a contrast between the letters and the background. It was best to have a high contrast.

Other criteria mentioned by the participants in the study were the following. Keep the number of signs to a minimum. Messages should be brief, clear, and direct. Sign color, wording, and placement should be uniform throughout the building and sign location should be where it is most visible and relevant. Signs must be clear, simple, easy to read and understand. Letter type, size, and background color should be consistent. All signs made must be done on a sign machine or computer (Ragsdale & Kenney, 1995, p. 5).

When designing library signage, general guidelines and good signage criteria are essential, but there are mistakes to avoid when designing, producing, and installing library signage.

In their research results, Ragsdale & Kenney (1995) reported some of the mistakes to avoid when designing, producing, and/or installing signs.

It is best to avoid too many signs with too many words. Signs should not be too big or too small. Signs should not provide answers for which there are no questions. Do not listen to the architect about the selection of signs if it is different from what you think the patrons need. Having obsolete signs or signs that misinform. Do not use all capital letters. Lack of color contrast. Using large plexiglass panels that are fragile, expensive to replace, and sometimes promote

glare. Using adhesive letters on a matte board as it is sufficiently porous to dry out the adhesive overnight. Letters that break easily. Handwritten signs. Sloppy and crooked installation. Ceiling-hung directional signs that are 2-3' above eye level. Signs which are not tamper resistant (Ragsdale & Kenney, 1995, p. 6).

In summary, when making a decision as to whether a public library has proper or improper signage, it is best to look at the situation from the perspective of a library user. Will the library user be able to read a directional sign from the front entrance? Will the library user know where to go from any place in the library? Are the signs clear and easy to read? Does the library meet ADA standards? ADA standards for public facilities are a necessity when considering the disabled public library users' needs.

ADA Compliant Signage

For public libraries to be user-friendly, library staff should consider signage that meets ADA requirements. In her report, Beck (1996) referred to Title III of the Americans with Disabilities Act of 1990. "Title III of the ADA extends nondiscrimination policy beyond the employment context to the broader range of building and facility accessibility, thus enabling individuals with disabilities to participate more fully in the mainstream of society" (p. 32). She also reported that "if a library does not comply with the current law, the legal remedies were the same as under Title VII of the Civil Rights Act of 1964: 'individuals may bring private lawsuits to obtain court orders to stop discrimination.'" (p. 32). Beck stated that if a library does not comply with the ADA requirements, a library user may file a lawsuit against the library. As a gesture of good faith, a library should try to comply and help its disabled library users.

Johnson's report entitled "Signage and the ADA" provided information on ADA signage and libraries.

New signs that you must add include the International Symbol of Accessibility at the entrance to your library. This symbol is also required at all accessible restrooms and areas of rescue assistance. Signs designating permanent rooms and spaces, whether they are room numbers or names of rooms, must include tactile lettering(i.e., lettering that is a minimum of 1/32 of an inch thick), upper case, 5/8 of an inch to 2 inches tall, and grade 2 Braille. Permanent spaces [rooms] must have [their] room number[s] displayed 60 inches from the center of the sign to the floor, on the same side of the door as the handle (Johnson, 1996, p. 48-49).

Johnson also mentioned that it was required to have signs that are non-glare and have sharp contrasts. All overhead signs should have letters that are 3 inches high and hung with a minimum clearance of 80 inches (p. 50). She concluded that making minor changes and additions to existing signage was a way to be accommodating to disabled library patrons.

Summary of Literature Review

Signage is an important issue in any public library. Library usage by patrons should be easy and efficient. Library users should feel comfortable and at ease when accessing a library. "A basic need is that a person be able to find the way to the library and then to locate the services inside" (Beck, 1996, p. 28). Good signage techniques and criteria can be helpful to users and wayfinding in the library. Good signage involves brief, clear, and direct messages on signs, appropriate installation, and perpendicular arrangement to traffic flow. Sign color, wording, and placement should be uniform

throughout the building, the number of signs should be kept at a minimum, and if there is a need for a sign, then make it. Library staff should eliminate poor signage. Mistakes to avoid when designing and installing signs included the following: Avoid sign overload and wordiness. Avoid making signs that are too big or too small. Keep signs current. Use contrasting colors on signs. Avoid all capital letters and signs with glare. Signs should not be crooked or sloppy or more than 2 to 3 feet above eye-level.

Public libraries need to be current on ADA signage standards for their patrons with disabilities. This includes signage that has an 80-inch clearance, three-inch high lettering, and matte finish. Permanent signage should be equipped with grade 2 Braille and raised lettering. Signage next to doorways should be at least three inches from the door handle and 60 inches from the center of the sign to the floor. With improved signage, all public library users should be capable of finding library services, departments, and materials easily and self-sufficiently.

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CHAPTER THREE

METHODOLOGY OF STUDY

Overall Design and Justification

This study used applied research with unobtrusive, indirect data collection.

Applied research was used to discover signage problems and, using prior research,

recommendations were made to solve the problems. An unobtrusive observation

technique was used to collect data. This type of research was used to collect data on

signage to get an unbiased opinion of the types of signs used in selected Southern New

Jersey public libraries. Powell stated that "unobtrusive observation in a public setting

requires the researcher to fade quietly and naturally into the surroundings" (Powell, 1997,

p. 150). Since this study was based upon the assumption that signage in Southern New

Jersey public libraries was poor, it was important to use unobtrusive observation as the

research method.

Statement of Purpose and Research Questions

The purpose of this study was to discover if selected public libraries in eight

Southern New Jersey counties were practicing the principles of good signage for the

benefit of their patrons. Eight public libraries in Southern New Jersey were observed for

signage practices. A checklist of good signage criteria and ADA requirements was used

to assess the libraries' signs used for direction, identification, and orientation. General

principles of good signage and ADA requirements for signage came from prior studies.

The questions that guided this study were the following:

1. Through observation, what good signage criteria were eight public libraries using in eight Southern New Jersey counties?

2. What changes were needed to improve the signage used for direction, identification, and orientation in the observed Southern New Jersey public libraries?

Population and Sample

The population for this study consisted of the eight southern-most counties in New Jersey. The eight Southern Jersey counties chosen were Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Ocean, and Salem. Each county contained a library system with one main library that was the administrative center. The exception to this rule was Salem County, which was not part of a library system.

The sample was chosen using 2002 data from the National Center for Education Statistics (NCES, n.d.). Criteria used to choose the public libraries were location, administrative structure, number of central libraries, legal service area population, and total circulation. One public library was chosen in each county. Each library chosen was located in Southern New Jersey, was the administrative center of the library system, was the central library, had the highest legal service area population, and the highest circulation totals.

The libraries in the study were the following:

1. The Atlantic County Library in Mays Landing, Atlantic County, was the administrative center and the central library in the system. Its legal service area population was 181,307 and its total circulation was 798,563.

2. The Burlington County Library in Westampton, Burlington County, was the administrative center and central library in the system. Its legal service area population was 331,148 and its total circulation was 1,857,939.

3. The Camden County Library in Voorhees, Camden County, was the administrative center and central library in the system. Its legal service area population was 242,830 and its total circulation was 1,057,039.

4. The Cape May County Library in Cape May Court House, Cape May County, was the administrative center and central library in the system. Its legal service area population was 86,948 and its total circulation was 412,047.

5. The Cumberland County Library in Bridgeton, Cumberland County, was the administrative center and central library in the system. Its legal service area population was 67,396 and its total circulation was 65,895.

6. The Gloucester County Library in Mullica Hill, Gloucester County, was the administrative center and central library in the system. Its legal service area population was 93,711 and its total circulation was 486,512.

7. The Ocean County Library in Toms River, Ocean County, was the administrative center and central library in the system. Its legal service area population was 509,638 and its total circulation was 4,576,751.

8. The Pennsville Public Library in Pennsville, Salem County, was not part of a library system. Its legal service area population was 13,194 and its total circulation was 28,336.

Variables

The unobtrusive observational research studied the directional, orientation, and identification signage in eight Southern New Jersey public libraries. The interior signage was observed for criteria based upon previous research on library signage:

Signage should match the building architecture and furniture color. Signs that serve the same function should be consistent and have the same size, shape, layout, type size, color, and placement. Signage design should consist of upper and lowercase lettering, clear typeface, large size, spacing of letters, color contrast, and use of symbols. Size of signs should be readable from a distance and positioned for self-service. Signs should be well-lighted, easy to read, and positioned for a clear view. Terminology should be consistent. Signs should have clear and accurate text. The signage system should be flexible. Sign redundancy should be avoided. Signs should be positioned to avoid injuries. Signs should be vandal proof. There should be a library directory on each floor near each stairway or elevator. Directional signs should be available to lead patrons to different departments. Identification signs should be on every doorway or entranceway to identify the function or service in that room or area. Temporary signs should be available to highlight temporary collections and services and the announce events. Signage on end panels should be easy to replace or change.

ADA requirements for signs in public libraries were also observed. Those criteria included the following: All accessible elements should display the International Symbol of Accessibility. Signs should be perpendicular to the route of travel. Permanent signs should be clear of any objects or doors. Hanging signs should have a minimum six feet, eight inch clearance and the letters should be three inches in height. Permanent signs

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should be mounted on the latch side of a door five feet from the center of the sign to the floor. Braille markings should be included on permanent signs. Permanent signs with Braille should have letters that are .625 of an inch to two inches in height, raised three percent per inch, and have Grade two Braille. Permanent signs should have a nonglare finish.

Method of Data Collection/Instrument Used

Unobtrusive observation was the method used to collect data in eight South Jersey public libraries. During a four-week period, a checklist for directional, identification, and orientation signage was the instrument used to collect data (see Appendix A). The discussion of the development of the checklist prior to observing is found in chapter four. The checklist focused on ideal interior signage criteria and ADA signage requirements. One checklist was used for each library. Checklists were organized by library name, county, and ID #. Questions required an answer that varied between yes (100%), yes (99%-75%), yes (74%-50%) or no (49%-1%), and no (0%). Some questions received an answer of not applicable or not ADA compliant.

Reliability and Validity

Two pre-tests were done to determine if the checklist was reliable. The pre-tests were done at the Free Public Library of Salem County and the Cherry Hill Public Library, which were not part of the sample. The external reliability was based upon doing the research over a period of four weeks. Signage was the same during the four weeks of observations. The pre-tests also determined whether the checklist was valid (whether the findings were true). Based on the pre-tests, the checklist was determined to be valid for the libraries in the study.

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CHAPTER FOUR

ANALYSIS OF DATA

Procedures/Methods Used

Unobtrusive observation was the method used to collect data in eight Southern

New Jersey public libraries. During a four-week period, a checklist for directional,

orientation, and identification signage was the instrument used to collect data (see

Appendix A). The checklist focused on good interior signage criteria and ADA signage

requirements. One checklist was used for each library. Checklists were organized by

library name, county, and ID #. Answer choices were broken down into percentages

depending upon the number of good signs each library had for each question. Questions

required an answer that varied between yes (100%), yes (99%-75%), yes (74%-50%) or

no (49%-1%), and no (0%). Some questions received an answer of not applicable or not

ADA compliant.

The response rate was 100%; all eight libraries in the study were observed during

the time period for good signage criteria based upon the checklist. Some adjustments

were made to the checklist after the pre-tests. Answers to signage questions were

adjusted to show percent ranges according to how much of the libraries' signage met

ideal signage criteria. Two questions were added to the checklist after observing the pre-

test libraries:

1. L. Is there an adequate number of signs designating various departments,

sections and services?

2. O. Are signs in good physical condition?

The statistical software package, SPSS, was used to compile and analyze the data from the checklists. The software provided the capability to use frequency tables to show data results in the form of percentages. It calculated the number of libraries that fell under certain signage percentages for each question. Percentages varied between yes (100%), yes (99%-75%), yes (74%-50%) or no (49%-1%), no (0%), Not Applicable and not ADA compliant.

Variables Studied

Good directional, identification, and orientation signage in eight Southern New Jersey public libraries was the focus of this study. Focus was upon sign system integration with the library structure and furniture, signage design and size, lighting and readability, signage visibility, consistency in sign terminology, signage flexibility, adequate number of signs, physical condition of signs, floor directories, temporary signs and signs to announce events, and ADA compliant signage.

Statistical Analysis Used

For the purposes of this study, data results were compiled into frequency tables and organized by percentages for each question. Descriptive statistics were used to present the results of the signage study. Results of this study could not be generalized or used statistically with any other library. The checklist on good directional, identification, orientation, and ADA signage was used only for the eight Southern New Jersey public libraries in the study.

Results of Study

One library in each of the eight counties in Southern New Jersey was represented

in this study. The checklist was based upon ideal signage criteria and ADA signage

requirements in public libraries. For each question, the libraries were given a checkmark

according to the number and percentage of all the signs in that library that met each

criteria. Results were organized by the checklist questions. Frequency tables were used

in chapter four for all questions except those that resulted in yes or no answers of 100%

to 75% for all libraries. All tables and results for all questions are located in Appendix B.

Eight Southern New Jersey public libraries were unobtrusively observed between

the dates of 2/4/05 and 2/22/05 for ideal signage criteria including ADA signage

requirements. The first two questions, A1 and A2, pertained to sign system integration

with the library architecture and furniture. Out of the eight libraries, four had 50% to

99% of their signs matching the architecture and four had less than 50% matching the

architecture. Two libraries had 50% to 99% of their signs matching the furniture color

and six had less than 50% matching the furniture color (see Tables 1 and 2).

Table 1

Does the sign system match the architecture?

	Libraries	Percentage
Yes 99%-75%	2	25%
Yes 74%-50%	2	25%
No 49%-1%	2	25%
No 0%	2	25%

Table 2

Does the sign system match the furniture color?

	Libraries	Percentage
Yes 99%-75%	1	12.5%
Yes 74%-50%	1	12.5%
No 49%-1%	4	50%
No 0%	2	25%

The next six questions, B1 to B6, referred to good signage design including upper and lower case letters, good signage typeface, spacing of letters, color contrast, use of symbols, and color combinations. Table 3 shows that half of the libraries in the study had 50% to 100% of their signs containing upper and lower case letters. The other half of the libraries had less than 50% of their signs containing upper and lower case letters (see Table 3).

Table 3

Use of upper and lower case letters?

	Libraries	Percentage
Yes 100%	1	12.5%
Yes 99%-75%	1	12.5%
Yes 74%-50%	2	25%
No 49%-1%	3	37.5%
No 0%	1	12.5%

All libraries in the study had 100% for good signage typeface, spacing of letters, color contrast, use of symbols, and appropriate color combinations. One library was not

applicable for the use of symbols since no symbols were evident at that time (see Appendix B).

The next question, C1, was "Are signs a readable distance by users?" One hundred percent of the signage in six libraries was a readable distance by users; Two libraries had 50% to 74% of their signage a readable distance by users (see Table 4).

Table 4

Are signs a readable distance by users?

	Libraries	Percentage
Yes 100%	6	75%
Yes 74%-50%	2	25%

The next two questions, C2 and C3, pertained to sign sequence and sign positioning to facilitate self-service. For both questions, all libraries had 75% to 100% of their signs in a sequential order and positioned to facilitate self-service (see Appendix B).

The next three questions, D, E, and F, pertained to signage clarity. All eight libraries had 75% to 100% of their signs well lighted; One hundred percent of the signs in seven libraries were easy to read and 74% to 50% of the signs were easy to read at one library. All libraries had signs positioned for a clear view (see Appendix B).

Seventy-five percent to 100% of the signs in all eight libraries used terminology consistently (question G). Only one term should be applied to any one area or service. The next two questions on the checklist referred to the text of the sign (questions H and I). All libraries in the study had 100% of their signs consisting of text that communicated effectively and positively (see Appendix B).

The next question in the study concerned sign flexibility. Question J was "Is the signage system flexible enough that, as conditions change, signs can be changed or moved easily?" All libraries had a flexible signage system that could be moved or changed easily (see Appendix B).

Table 5 referred to the question about signage redundancy (question K). The question was "Is redundancy avoided?" Too many signs all providing the same message can be as bad as no signs at all. Six libraries avoided signage redundancy 100%, one was 99% to 75%, and one was 74% to 50% (see Table 5).

Table 5

Is redundancy avoided?

	Libraries	Percentage
Yes 100%	6	75%
Yes 99%-75%	1	12.5%
Yes 74%-50%	1	12.5%

Question L was "Is there an adequate number of signs designating various departments, sections, and services?" Table 6 shows the breakdown. Five libraries out of eight had 99% to 75% adequacy, one was 74% to 50% adequate, and two were 49% to 1% adequate (see Table 6).

Table 6

Is there an adequate number of signs?

	Libraries	Percentage
Yes 99%-75%	5	62.5%
Yes 74%-50%	1	12.5%
No 49%-1%	2	25%

Question M on the checklist pertained to hanging signs. "Are signs positioned and designed to avoid injuries?" The focus was on the height and arrangement of the signs. Five libraries had 100% of their signs positioned and designed to avoid injuries and three had 99% to 75% of their signs positioned and designed to avoid injuries (see Appendix B).

Next, the study focused upon the signs being reasonably vandal proof (question N). Table 7 shows the signage percentages for the libraries. Three libraries had 75% to 100% of their signs as reasonably vandal proof, one library had 74% to 50% vandal proof, and four had 49% to 1% vandal proof (see Table 7).

Table 7

Are signs reasonably vandal proof?

	Libraries	Percentage
Yes 100%	1	12.5%
Yes 99%-75%	2	25%
Yes 74%-50%	1	12.5%
No 49%-1%	4	50%

Although 50% of the libraries in the study had less than 50% of their signs as reasonably vandal proof, 75% to 100% of the libraries signs were in good physical condition, question O (see Appendix B).

The next two questions on the checklist pertained to library directories used for library orientation (P1 and P2). Tables 8 and 9 showed that six libraries received a checkmark of 100% for directories near access points, one received a checkmark of 99% to 75% for directories near access points, and one library received 0% for directories near

access points. For the question "Is there at least one directory per floor?" four libraries received a checkmark of 100%, one received a checkmark for 74% to 50%, two received checkmarks for 49% to 1%, and one had 0% for directories per floor (see Tables 8 and 9).

Table 8

Are there directories near access points?

	Libraries	Percentage	
Yes 100%	6	75%	
Yes 99%-75%	1	12.5%	
No 0%	1	12.5%	

Table 9

Is there at least one directory per floor?

	Libraries	Percentage	
Yes 100%	4	50%	
Yes 74%-50%	1	12.5%	
No 49%-1%	2	25%	
No 0%	1	12.5%	

The next question on the checklist pertained to directional signage. Question Q asked "Is there a sufficient number of directional signs leading patrons to different departments and placed at logical decision points?" Two libraries received checkmarks of 100% for directional signage, three received checkmarks of 99% to 75%, two received checkmarks of 74% to 50%, and one received a checkmark of 49% to 1% (see Table 10).

Table 10

Is there a sufficient number of directional signs leading patrons?

	Libraries	Percentage
Yes 100%	2	25%
Yes 99%-75%	3	37.5%
Yes 74%-50%	2	25%
No 49%-1%	1	12.5%

Question R was "Are there signs on doors and at entrances to departments to identify the function or service within that room or area?" All libraries in the study received checkmarks of 75% to 100% for signage on doors and entrances to departments (see Appendix B).

Table 11 pertained to question S "Are there signs to highlight temporary collections and services?" Three libraries received checkmarks of 100%, three libraries received checkmarks of 99% to 75%, one library received a checkmark of 74% to 50%, and one library received a checkmark of 49% to 1% (see Table 11).

Table 11

Are there signs to highlight temporary collections and services?

	Libraries	Percentage
Yes 100%	3	37.5%
Yes 99%-75%	3	37.5%
Yes 74%-50%	1	12.5%
No 49%-1%	1	12.5%

Question T stated "Are there signs to announce events taking place in the library?" All eight libraries had 100% for signs that announce events taking place in the library. Also, for question U "Are there signs that can be easily changed on the end panels of stacks?" All libraries in the study received a checkmark of 100% (see Appendix B).

The next three questions in the study dealt with signage consistency in the public libraries. Signs that serve the same function throughout the building should have the same shape, size, layout, type size, and placement. Table 12 referred to question V1 "Is there consistency in directional signs throughout the building?" Four libraries in the study were 100% for directional signage consistency, one was 99% to 75% consistent, and three were 49% to 1% consistent (see Table 12).

Table 12

Is there consistency in directional signs throughout the building?

	Libraries	Percentage
Yes 100%	4	50%
Yes 99%-75%	1	12.5%
No 49%-1%	3	37.5%

Question V2 referred to the consistency of orientation signs throughout the building. All libraries except one were rated 100% for consistent orientation signs; one library ranked Not Applicable because it had no orientation signs (see Appendix B). Table 13 referred to question V3 "Is there consistency in identification signs throughout the building?" Two libraries were 100% for consistency in identification signs, two were 74% to 50%, and four were 49% to 1% (see Table 13).

Table 13

Is there consistency in identification signs throughout the building?

	Libraries	Percentage
Yes 100%	2	25%
Yes 74%-50%	2	25%
No 49%-1%	4	50%

Part II of the checklist referred to ADA compliant signage in the libraries.

Question A was "Do all accessible elements display the International Symbol of

Accessibility?" Table 14 showed that five libraries rated 100%, one rated 99% to 75%,

one rated 49% to 1%, and one library was Not ADA Compliant (see Table 14).

Table 14

Do all accessible elements display the International Symbol of Accessibility?

	Libraries	Percentage
Yes 100%	5	62.5%
Yes 99%-75%	1	12.5%
No 49%-1%	1	12.5%
Not ADA Compliant	1	12.5%

Question B was "Are the signs placed perpendicular to the route of travel?" Four

libraries were at 100% for ADA signs placed perpendicular to the route of travel, one was

99% to 75%, one was 74% to 50%, one was 49% to 1%, and one library was Not ADA

compliant (see Table 15).

Table 15

Are the signs placed perpendicular to the route of travel?

	Libraries	Percentage
Yes 100%	4	50%
Yes 99%-75%	1	12.5%
Yes 74%-50%	1	12.5%
No 49%-1%	1	12.5%
Not ADA Compliant	1	12.5%

Question C was "Can permanent signs be approached without encountering a protruding object or standing within the area of a swing door?" Table 16 showed 100% compliance for six libraries, 49% to 1% compliance for one library, and one library was Not ADA Compliant (see Table 16).

Table 16

Can permanent signs be approached without encountering an object or door?

	Libraries	Percentage
Yes 100%	6	75%
No 49%-1%	1	12.5%
Not ADA Compliant	1	12.5%

Question D on the checklist was "If permanent signs are hanging (minimum 80 inches from the floor), are the letters and numbers at least three inches in height?" Table 17 showed that two libraries in the study met that requirement 100%, one library 74% to 50%, two libraries 49% to 1%, one library 0%, and one library was Not ADA Compliant (see Table 17).

Table 17

If permanent signs are hanging (min. 80 inches), are the letters at least 3 in. in height?

	Libraries	Percentage
Yes 100%	2	25%
Yes 74%-50%	1	12.5%
No 49%-1%	2	25%
No 0%	1	12.5%
Not Applicable	1	12.5%
Not ADA Compliant	1	12.5%

Question E was "Are permanent signs for rooms and spaces installed on the wall adjacent to the latch side of the door and mounted 60 inches from the center of the sign to the floor?" Table 18 showed 100% for two libraries, 74% to 50% for two libraries, 0% for three libraries, and Not ADA Compliant for one library (see Table 18).

Table 18

Are permanent signs for rooms and spaces installed on the latch side of the door and mounted 5 ft. from the floor?

	Libraries	Percentage
Yes 100%	2	25%
Yes 74%-50%	2	25%
No 0%	3	37.5%
Not ADA Compliant	1	12.5%

The next four questions on the checklist pertained to Braille markings and signs in the libraries. Question F was "Are Braille markings used throughout the library for the blind user to locate access?" Four of the libraries in the study rated 100%, two libraries rated 49% to 1%, one library rated 0%, and one library was Not ADA Compliant (see Table 19).

Table 19

Are Braille markings used throughout the library for the blind user to locate access?

	Libraries	Percentage
Yes 100%	4	50%
No 49%-1%	2	25%
No 0%	1	12.5%
Not ADA Compliant	1	12.5%

Questions G1, G2, and G3 pertained to Braille signage. "Are the letters and numbers of permanent Braille signs: 'At least .625 inch but no more than 2 inches in height?' 'Raised 3% per inch?' 'Accompanied by Grade 2 Braille?'" Results of the study for these questions were 100% for six libraries and two libraries were Not ADA Compliant (see Appendix B).

Question H applied to all ADA signage: "Are the characters and backgrounds of permanent signs constructed with a matte, nonglare, eggshell colored, or some other nonglare finish?" Five libraries in the study met this requirement 100%, two libraries were 99% to 75% and one was Not ADA Compliant (see Appendix B).

The last question, question I, on the checklist was "Overall, do all signs designating permanent rooms and spaces in the building comply with the ADA accessibility guidelines for buildings and facilities?" Table 20 showed that one library

met this guideline 100%, three libraries met the guideline 99% to 75%, three libraries met

the guideline 49% to 1%, and one library was Not ADA Compliant (see Table 20).

Table 20

Overall, do all signs designating permanent rooms and spaces comply with the ADA accessibility guidelines?

	Libraries	Percentage	
Yes 100%	1	12.5%	
Yes 99%-75%	3	37.5%	
No 49%-1%	3	37.5%	
Not ADA Compliant	1	12.5%	

CHAPTER FIVE

SUMMARY AND CONCLUSIONS

Summary

The purpose of this study was to unobtrusively observe eight Southern New Jersey public libraries in eight different counties to discover if they were practicing the principles of good signage for the benefit of their patrons. A checklist of good signage criteria and ADA requirements was created and used to assess the libraries' signs. Principals of good signage and ADA signage came from prior studies. Using SPSS, frequency tables were generated for each question to show the signage percentages for the libraries in the study. The eight public libraries in the study rated well in the areas of signage design (typeface, spacing of letters, contrast, use of symbols, and color combinations), sign size, sequence and self-service, lighting, readability, effective and positive text, flexibility, and non-glare. Most libraries had at least one directory and signs to announce events taking place in the library. The libraries had poor signage issues, especially in signage consistency and ADA signage requirements. There was a lack of directional and identification signage, which may cause some patrons to ask repetitive directional questions.

Results of Findings

Two research questions guided this study. 1. Through observation, what good signage criteria were eight public libraries using in eight Southern New Jersey counties?

2. What changes were needed to improve the signage used for direction, identification, and orientation in the observed Southern New Jersey Public libraries?

Good Signage

It was discovered that the central libraries in the eight counties observed had adequate signage in several areas. Under the category of good signage design, all libraries in the study received scores of 100% for signage typeface, spacing of letters, color contrast, use of symbols, and appropriate color combinations. Also, 75% of the libraries in the study had signs that were a good readable distance by patrons.

The libraries did well with sign sequence and sign positioning. Sign lighting, positioning, and readability were 75% to 100% for almost all libraries. Sign terminology was consistent from one department to another (75% to 100%), text communicated effectively and positively for all signs in all libraries.

All libraries in the study had a flexible signage system that could be changed or moved easily. Most libraries avoided signage redundancy. Most signs were positioned and designed to avoid injuries and 75% to 100% of them were in good physical condition.

Seventy-five percent of the libraries in the study had at least one directory near one access point. All libraries were 100% for signs that announce events taking place in the library and signs that can be easily changed on the end panels of stacks. Seven out of eight libraries were 100% for consistent orientation signs, meaning they had the same shape, size, layout, type size, and placement.

For ADA signage criteria, the eight central libraries were adequate in only a few areas. Seventy-five percent of the libraries had permanent signage that could be

approached without encountering a protruding object or standing within the area of a swing door. Seventy-five percent also had good Braille signage. Seven out of eight libraries had 75% to 100% of their permanent signs constructed with a nonglare finish. Only half of the libraries in the study had signs that were ADA compliant.

Poor signage

Observations of the eight central libraries in Southern New Jersey showed that changes were needed to improve the signage used for direction, identification, and orientation. Libraries were weak in some signage areas. Sign system integration with the building architecture and furniture was poor for most libraries in the study. For half of the libraries in the study, less than 50% of their signs matched the architecture; the other half of the libraries had some lack of matching signs. Seventy-five percent of the libraries in the study had less than 50% of their signs matching the furniture color, including the carpeting. The other 25% had some signs not matching the furniture. The problem was that most of the signage in these libraries was installed after the furniture and architecture was established, not during the establishment.

Half of the libraries in the study had less than 50% of their signs created with upper and lower case letters. Many signs in these libraries were all upper case or all lower case.

All libraries did not have an adequate number of signs designating various departments, sections, and services. Three libraries out of eight were missing at least 26% to 50%. The other five libraries were missing some signs. The signs most missed in this category were identification signs designating book sections or signs were located only on one end of the stack.

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Almost all of the libraries in the study had signs that were not vandal proof. Less than 50% of the signs in half of the libraries were vandal proof. Many signs were just paper taped onto the wall or onto the stacks.

Fifty percent of the libraries in the study did not have an adequate number of directories per floor. There should have been one directory per floor identifying major library services and their locations. One out of four did not have any directories and three were missing one or two.

Seventy-five percent of the libraries did not have a sufficient number of directional signs leading patrons to different departments and placed at logical decision points. Some important signs were missing that would have been helpful for someone looking for a specific section or department.

Five libraries in the study had some signs missing on doors and at entrances to departments to identify the function or service within that room or area. Also, five libraries were missing signs to highlight temporary collections and services. Some book displays did not have signs.

There were some problem areas for most libraries under the category of signage consistency. Signs that serve the same function throughout the building should have the same shape, size, layout, type size, and placement. Directional signs in the libraries should have been the same, but 50% of the libraries in the study had some directional signs that lacked consistency. Out of that 50%, 37.5% of the libraries in the study had less than 50% of their directional signs consistent. Some of the problems were that signs differed from department to department. Directional signs for fiction, non-fiction, and reference might differ from directional signs for children's, teens, CDs, and periodicals.

Some signs were handmade, printed, or professionally done with different sizes and shapes.

The other problem area in this category was identification signage. Signs that identify sections or departments in a library should all be the same. Seventy-five percent of the libraries in the study lacked consistent identification signage. Out of the 75%, 50% of the libraries had less than 50% consistent identification signage. The biggest problem was the signage on the ends of the book stacks. Some signs were paper, printed and taped on bookshelves, others were in frames. The shapes and sizes of the signs varied from department to department. In some cases, the layout and type size were different depending upon if the sign was a replacement or done professionally.

Libraries in this study had some lack of ADA compliant signage. Three out of eight libraries had a lack of accessible elements displaying the International Symbol of Accessibility. One library in the study was not ADA compliant. Libraries were missing the symbol on automatic doors, bathrooms, and permanent spaces. Half of the libraries in the study had some lack of perpendicular signs to the route of travel. This meant that handicapped patrons may miss important signs because they were not visible from the route of travel, especially restroom signs and department signs.

There was a lack of permanent overhead signage with letters large enough to be seen from the front entrances or ends of the walkways. Hanging signs needed to have letters that were at least three inches in height. Seventy-five percent of the libraries in the study lacked some or all overhead signs with letters that were at least three inches in height.

Permanent signs for rooms and spaces should be installed on the latch side of the door and mounted 5 feet from the floor. Seventy-five percent of the libraries in the study had some or all signs mounted improperly or missing. At least 50% of the libraries in the study did not have any signs installed properly. Some were mounted on the door, which could cause an accident if someone were to open the door.

Half of the libraries in the study were missing Braille signage. Fifty percent of the libraries in the study had less than 50% of their permanent signs equipped with Braille markings. Two libraries did not have any Braille signage.

Overall, 50% of the libraries in the study were not ADA compliant. Another 37.5% were only 99%-75% compliant. Overall, all libraries except one were missing ADA compliant signage in areas such as Braille markings on signs, overhead signs with 3 inch letters, properly installed signage on doors, perpendicular signs, and the International Symbol of Accessibility.

Conclusions to the Study

The eight central libraries of Southern New Jersey observed in this study on directional, orientation, and identification signage proved to be interesting and informative as to which signage areas needed improvement and which areas were adequate. It was discovered that most libraries in the study rated well in the areas of signage design (typeface, spacing of letters, contrast, use of symbols, and color combinations), sign size, sequence and self-service, lighting, readability, effective and positive text, flexibility, and non-glare. Most libraries had at least one directory and signs to announce events taking place in the library.

Improvements were needed in areas such as sign system integration with the library architecture and furniture. Most signs in the libraries did not match the building or furniture. Some signs were all upper or all lower case, which is difficult to read from a distance. There was a lack of consistency in directional and identification signs. Signs differed from one area to the next. This can cause confusion for new patrons. Overall, there was not enough signage for patrons to make smooth transitions from one department to another. In some cases, it was difficult to navigate a section because some signs were missing. Most signs were just paper that could be easily torn down.

Almost all of the libraries in the study did not meet the ADA signage requirements. There was a lack of handicap accessible restrooms and doors, some signage did not have Braille, signs were installed improperly and not perpendicular to the route of travel, and hanging signs did not have letters that were at least 3 inches high.

For public libraries to be user friendly, they must be adapted to the needs of the library user and patron. Librarians need to take into consideration not only customer service, but also self-service. Library patrons will not always ask for help; they need to feel comfortable in their surroundings and feel self-sufficient. Good signage criteria in any library can improve customer service and make patrons feel more comfortable. They should be able to navigate a library facility without asking for help.

From this limited study of eight central libraries in South Jersey, it was discovered that libraries did have poor signage issues, especially in signage consistency and ADA signage requirements. There was a lack of directional and identification signage, which may cause some patrons to ask repetitive directional questions. The lack of proper ADA signage may result not only in patron loss, but also in lawsuits.

Recommendations for Further Study

Using the results of this study on directional, identification, and orientation

signage, librarians could do evaluations of their libraries signs and correct deficiencies.

The checklist could be used at other libraries in the state to help validate the checklist. It

could be used at other county libraries, library branches, and municipal libraries.

Librarians at each central library in the study could do evaluations using the checklist to

remedy the poor signage areas.

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APPENDIX A

Signage Checklist

Checklist for Directional, Orientational, and Identification Signage
in Eight Southern New Jersey Public Libraries

This checklist was designed from previous research on library signage. The purpose of this checklist was to unobtrusively observe and collect data on directional, orientational, and identification signage in eight public libraries in Southern New Jersey. The lower eight counties were chosen for research. At least one library in each county was represented in the study. The checklist was based upon ideal signage criteria and ADA signage requirements in public libraries. Questions required either a yes (100%), yes (99%-75%), yes (74%-50%), no (49%-1%), no (0%), or not applicable answer and all questions had room for comments.

Library Name and ID #:

County:

	YES 100%	YES 99%-75%	YES 74%-50%	NO 49%-1%	NO 0%	N/A

I.   Interior Signage Criteria

A. Sign System Integration
   1. Does the sign system match the architecture (building)?

   2. Does the sign system match the furniture color?

   Comments:

	YES 100%	YES 99%-75%	YES 74%-50%	NO 49%-1%	NO 0%	N/A

B. Good Signage Design
    1. Upper and lower case letters?
    2. Typeface?
    3. Spacing of Letters?
    4. Contrast?
    5. Use of symbols?
    6. Color Combinations?

Comments:

C. Sign Size
    1. Are signs a readable distance by users?
    2. Are they sequential?
    3. Are they positioned to facilitate self service?

Comments:

	YES 100%	YES 99%-75%	YES 74%-50%	NO 49%-1%	NO 0%	N/A
D. Are the signs well lighted?	___	___	___	___	___	___
Comments:						
E. Are signs easy to read?	___	___	___	___	___	___
Comments:						
F. Are signs positioned for a clear view?	___	___	___	___	___	___
Comments:						
G. Do signs use terminology consistently? (Only one term should be applied to any one area, service, etc.)	___	___	___	___	___	___
Comments:						

	YES 100%	YES 99%-75%	YES 74%-50%	NO 49%-1%	NO 0%	N/A
H. Is the text of the sign clearly and accurately written in order to communicate the intended message effectively?	____	____	____	____	____	____
I. Positively?	____	____	____	____	____	____

Comments:

| J. Is the signage system flexible enough that, as conditions change, signs can be changed or moved easily? | ____ | ____ | ____ | ____ | ____ | ____ |

Comments:

| K. Is redundancy avoided? (Too many signs, all providing the same message, can be as bad as no sign at all.) | ____ | ____ | ____ | ____ | ____ | ____ |

Comments:

| L. Is there an adequate number of signs designating various departments, sections, and services? | ____ | ____ | ____ | ____ | ____ | ____ |

Comments:

	YES 100%	YES 99%-75%	YES 74%-50%	NO 49%-1%	NO 0%	N/A
M. Are signs positioned and designed to avoid injuries (sharp corners, height, etc.)?	___	___	___	___	___	___

Comments:

N. Are signs reasonably vandal proof?	___	___	___	___	___	___

Comments:

O. Are signs in good physical condition?	___	___	___	___	___	___

Comments:

	YES 100%	YES 99%-75%	YES 74%-50%	NO 49%-1%	NO 0%	N/A
P. 1. Are there directories near access points?	___	___	___	___	___	___
2. Is there at least one per floor identifying major library services and their locations?	___	___	___	___	___	___

Comments:

Q. Is there a sufficient # of directional signs available leading patrons to different departments and placed at logical decision points?

	___	___	___	___	___	___

Comments:

R. Are there signs on doors and at entrances to departments to identify the function or service within that room or area?

	___	___	___	___	___	___

Comments:

	YES 100%	YES 99%-75%	YES 74%-50%	NO 49%-1%	NO 0%	N/A
S. Are there signs to highlight temporary collections and services?	____	____	____	____	____	____

Comments:

T. Are there signs to announce events taking place in the library?	____	____	____	____	____	____

Comments:

U. Are there signs that can be easily changed on the end panels of stacks to identify which books are shelved in that range?	____	____	____	____	____	____

Comments:

	YES 100%	YES 99%-75%	YES 74%-50%	NO 49%-1%	NO 0%	N/A

V. Signage Consistency
1. Is there consistency in directional signs throughout
    the building?
2. Is there consistency in orientation signs throughout
    the building?
3. Is there consistency in identification signs throughout
    the building?
    (signs that serve the same function throughout the building
    should have the same shape, size, layout, type size, and placement)

Comments:

	YES 100%	YES 99%-75%	YES 74%-50%	NO 49%-1%	NO 0%	N/A

II. ADA Compliant Signage

A. Do all accessible elements display the
International symbol of accessibility?

Comments:

B. Are the signs placed perpendicular to
the route of travel?

Comments:

C. Can permanent signs be approached without
encountering a protruding object or standing
within the area of a swing door?

Comments:

	YES 100%	YES 99%-75%	YES 74%-50%	NO 49%-1%	NO 0%	N/A
D. If permanent signs are hanging (minimum 80 inches above the floor, 6'8" clearance), are the letters and numbers at least 3 inches in height? Comments:	____	____	____	____	____	____
E. Are permanent signs for rooms and spaces installed on the wall adjacent to the latch side of the door and mounted 60 inches (5 ft.) from the center of the sign to the floor? Comments:	____	____	____	____	____	____
F. Are Braille markings used throughout the library to enable the blind user to locate access? Comments:	____	____	____	____	____	____

	YES 100%	YES 99%-75%	YES 74%-50%	NO 49%-1%	NO 0%	N/A

G. Are the letters and numbers of permanent Braille signs:

   1. At least .625 inch but no more than 2 inches in height?

   2. Raised 3 percent per inch?

   3. Accompanied by Grade 2 Braille?

   Comments:

H. Are the characters and backgrounds of permanent signs constructed with a matte, nonglare, eggshell colored, or some other nonglare finish?

   Comments:

I. Overall, do all signs designating permanent rooms and spaces in the building comply with the ADA accessibility guidelines for buildings and facilities?
   Comments:

APPENDIX B

Frequency Tables

Frequency Table

ID

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	12.5	12.5	12.5
	2	1	12.5	12.5	25.0
	3	1	12.5	12.5	37.5
	4	1	12.5	12.5	50.0
	5	1	12.5	12.5	62.5
	6	1	12.5	12.5	75.0
	7	1	12.5	12.5	87.5
	8	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

NAME

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Bridgeton	1	12.5	12.5	12.5
	Cape May C.H.	1	12.5	12.5	25.0
	Mays Landing	1	12.5	12.5	37.5
	Mullica Hill	1	12.5	12.5	50.0
	Pennsville	1	12.5	12.5	62.5
	Toms River	1	12.5	12.5	75.0
	Voorhees	1	12.5	12.5	87.5
	Westampton	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

COUNTY

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Atlantic	1	12.5	12.5	12.5
	Burlington	1	12.5	12.5	25.0
	Camden	1	12.5	12.5	37.5
	Cape May	1	12.5	12.5	50.0
	Cumberland	1	12.5	12.5	62.5
	Gloucester	1	12.5	12.5	75.0
	Ocean	1	12.5	12.5	87.5
	Salem	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

DATE

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2405	1	12.5	12.5	12.5
	2705	1	12.5	12.5	25.0
	21005	1	12.5	12.5	37.5
	21105	1	12.5	12.5	50.0
	21205	1	12.5	12.5	62.5
	21405	1	12.5	12.5	75.0
	21705	1	12.5	12.5	87.5
	22205	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

Does the sign system match the architecture?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes 99%-75%	2	25.0	25.0	25.0
	Yes 74%-50%	2	25.0	25.0	50.0
	No 49%-1%	2	25.0	25.0	75.0
	No 0%	2	25.0	25.0	100.0
	Total	8	100.0	100.0	

Does the sign system match the furniture color?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes 99%-75%	1	12.5	12.5	12.5
	Yes 74%-50%	1	12.5	12.5	25.0
	No 49%-1%	4	50.0	50.0	75.0
	No 0%	2	25.0	25.0	100.0
	Total	8	100.0	100.0	

Upper and Lower Case Letters?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes 100%	1	12.5	12.5	12.5
	Yes 99%-75%	1	12.5	12.5	25.0
	Yes 74%-50%	2	25.0	25.0	50.0
	No 49%-1%	3	37.5	37.5	87.5
	No 0%	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

Good signage typeface?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes 100%	8	100.0	100.0	100.0

Good spacing of letters?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes 100%	8	100.0	100.0	100.0

Good signage color contrast?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes 100%	8	100.0	100.0	100.0

Good use of symbols?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes 100%	7	87.5	87.5	87.5
	Not Applicable	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

Appropriate color combinations?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes 100%	8	100.0	100.0	100.0

Are signs a readable distance by users?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes 100%	6	75.0	75.0	75.0
	Yes 74%-50%	2	25.0	25.0	100.0
	Total	8	100.0	100.0	

Are they sequential?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes 100%	7	87.5	87.5	87.5
	Yes 99%-75%	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

Are the positioned to facilitate self service?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes 100%	7	87.5	87.5	87.5
	Yes 99%-75%	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

Are the signs well lighted?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes 100%	6	75.0	75.0	75.0
	Yes 99%-75%	2	25.0	25.0	100.0
	Total	8	100.0	100.0	

Are signs easy to read?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes 100%	7	87.5	87.5	87.5
	Yes 74%-50%	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

Are signs positioned for a clear view?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes 100%	8	100.0	100.0	100.0

Do signs use terminology consistently?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes 100%	6	75.0	75.0	75.0
	Yes 99%-75%	2	25.0	25.0	100.0
	Total	8	100.0	100.0	

Does the text of the sign communicate effectively?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes 100%	8	100.0	100.0	100.0

Does the text of the sign communicate positively?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes 100%	8	100.0	100.0	100.0

Are the signs flexible enough to be moved easily?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes 100%	8	100.0	100.0	100.0

Is redundancy avoided?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes 100%	6	75.0	75.0	75.0
	Yes 99%-75%	1	12.5	12.5	87.5
	Yes 74%-50%	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

Is there an adequate number of signs?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes 99%-75%	5	62.5	62.5	62.5
	Yes 74%-50%	1	12.5	12.5	75.0
	No 49%-1%	2	25.0	25.0	100.0
	Total	8	100.0	100.0	

Are signs positioned and designed to avoid injuries?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes 100%	5	62.5	62.5	62.5
	Yes 99%-75%	3	37.5	37.5	100.0
	Total	8	100.0	100.0	

Are signs reasonably vandal proof?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes 100%	1	12.5	12.5	12.5
	Yes 99%-75%	2	25.0	25.0	37.5
	Yes 74%-50%	1	12.5	12.5	50.0
	No 49%-1%	4	50.0	50.0	100.0
	Total	8	100.0	100.0	

Are signs in good physical condition?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes 100%	3	37.5	37.5	37.5
	Yes 99%-75%	5	62.5	62.5	100.0
	Total	8	100.0	100.0	

Are there directories near access points?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes 100%	6	75.0	75.0	75.0
	Yes 99%-75%	1	12.5	12.5	87.5
	No 0%	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

Is there at least one directory per floor?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes 100%	4	50.0	50.0	50.0
	Yes 74%-50%	1	12.5	12.5	62.5
	No 49%-1%	2	25.0	25.0	87.5
	No 0%	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

Is there a sufficient # of directional signs leading patrons?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes 100%	2	25.0	25.0	25.0
	Yes 99%-75%	3	37.5	37.5	62.5
	Yes 74%-50%	2	25.0	25.0	87.5
	No 49%-1%	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

Are there signs on doors and at entrances to departments?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes 100%	3	37.5	37.5	37.5
	Yes 99%-75%	5	62.5	62.5	100.0
	Total	8	100.0	100.0	

Are there signs to highlight temporary collections and services?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes 100%	3	37.5	37.5	37.5
	Yes 99%-75%	3	37.5	37.5	75.0
	Yes 74%-50%	1	12.5	12.5	87.5
	No 49%-1%	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

Are there signs to announce events taking place in the library?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes 100%	8	100.0	100.0	100.0

Are there signs that can be easily changed on the end panels of stacks?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes 100%	8	100.0	100.0	100.0

Is there consistency in directional signs throughout the building?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes 100%	4	50.0	50.0	50.0
	Yes 99%-75%	1	12.5	12.5	62.5
	No 49%-1%	3	37.5	37.5	100.0
	Total	8	100.0	100.0	

Is there consistency in orientation signs throughout the building?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes 100%	7	87.5	87.5	87.5
	Not Applicable	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

Is there consistency in identification signs throughout the building?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes 100%	2	25.0	25.0	25.0
	Yes 74%-50%	2	25.0	25.0	50.0
	No 49%-1%	4	50.0	50.0	100.0
	Total	8	100.0	100.0	

Do all accessible elements display the International Symbol of Accessibility?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes 100%	5	62.5	62.5	62.5
	Yes 99%-75%	1	12.5	12.5	75.0
	No 49%-1%	1	12.5	12.5	87.5
	Not ADA Compliant	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

Are the signs placed perpendicular to the route of travel?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes 100%	4	50.0	50.0	50.0
	Yes 99%-75%	1	12.5	12.5	62.5
	Yes 74%-50%	1	12.5	12.5	75.0
	No 49%-1%	1	12.5	12.5	87.5
	Not ADA Compliant	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

Can permanent signs be approached without encountering an object or door?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes 100%	6	75.0	75.0	75.0
	No 49%-1%	1	12.5	12.5	87.5
	Not ADA Compliant	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

If permanent signs are hanging (min. 80 inches) are the letters at least 3 inches in height?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes 100%	2	25.0	25.0	25.0
	Yes 74%-50%	1	12.5	12.5	37.5
	No 49%-1%	2	25.0	25.0	62.5
	No 0%	1	12.5	12.5	75.0
	Not Applicable	1	12.5	12.5	87.5
	Not ADA Compliant	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

Are permanent signs for rooms and spaces installed on the latch side of the door and mounted 5 feet from the floor?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes 100%	2	25.0	25.0	25.0
	Yes 74%-50%	2	25.0	25.0	50.0
	No 0%	3	37.5	37.5	87.5
	Not ADA Compliant	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

Are Braille markings used throughout the library for the blind user to locate access?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes 100%	4	50.0	50.0	50.0
	No 49%-1%	2	25.0	25.0	75.0
	No 0%	1	12.5	12.5	87.5
	Not ADA Compliant	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

Are the letters and numbers of Braille signs at least .625 inch but no more than 2 inches in height?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes 100%	6	75.0	75.0	75.0
	Not Applicable	1	12.5	12.5	87.5
	Not ADA Compliant	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

Are the letters and numbers of Braille signs raised 3% per inch?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes 100%	6	75.0	75.0	75.0
	Not Applicable	1	12.5	12.5	87.5
	Not ADA Compliant	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

Are the letters and numbers of Braille signs accompanied by Grade 2 Braille?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes 100%	6	75.0	75.0	75.0
	Not Applicable	1	12.5	12.5	87.5
	Not ADA Compliant	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

Are the characters and backgrounds of permanent signs constructed with a nonglare finish?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes 100%	5	62.5	62.5	62.5
	Yes 99%-75%	2	25.0	25.0	87.5
	Not ADA Compliant	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

Overall, do all signs designating permanent rooms and spaces comply with the ADA accessibility guidelines?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes 100%	1	12.5	12.5	12.5
	Yes 99%-75%	3	37.5	37.5	50.0
	No 49%-1%	3	37.5	37.5	87.5
	Not ADA Compliant	1	12.5	12.5	100.0
	Total	8	100.0	100.0	