The primary objectives of this project were: (1) to identify population groups with information needs that differ from the needs of the general population, and to define these needs and (2) to formulate tentative specifications for post-1975 library services. Background work for these major objectives involved searching and reviewing the literature concerned with user studies and specifications for future library services. Consideration was also given to those planning methodologies that would be applicable to the development of future library and information services. This study concentrated on the special needs of identifiable subgroups in the population rather than on the needs of typical users who constitute the bulk of the public library clientele. All of these subgroups were identified and studied in terms of single variables, such as age, economic level, or housing location and were found to have information needs somewhat different from the needs of the general population. No effort was made to identify any subgroups in terms of multi-variable descriptions, such as the term "disadvantaged" might imply. This type of multi-variable analysis would be a very useful follow-up study. (Author/NH)
FINAL REPORT
Contract No. OEC-0-72-6691

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Marcia J. Bates
Gilda R. Perolman

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University of California
Berkeley, California 94720

PRELIMINARY INVESTIGATION OF
PRESENT AND POTENTIAL LIBRARY AND
INFORMATION SERVICE NEEDS

February 1973

PREPARED FOR
U. S. NATIONAL COMMISSION ON LIBRARIES AND INFORMATION SCIENCE
Washington, D.C.

This work has developed under contract OEC-0-72-6691 with the National Commission on Libraries and Information Science. However, the content does not necessarily reflect the position or policy of that agency and no official endorsement of these materials should be inferred.
Final Report
Contract No. OEC-3-72-0001

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### APPENDICES

#### A. REVIEW OF LITERATURE RELATING TO OBJECTIVES OR SPECIFICATIONS FOR FUTURE (POST-1975) LIBRARY SERVICES
   Victor Rosenberg and Gilda R. Perolman

   - A-1

#### B. SURVEY AND ASSESSMENT OF PLANNING METHODOLOGIES AND TECHNIQUES APPLICABLE TO THE DEVELOPMENT OF FUTURE LIBRARY AND INFORMATION SERVICE OBJECTIVES
   Victor Rosenberg

   - A-2
SUMMARY

The primary objectives of this project were 1) to identify population groups with information needs that differ from the needs of the general population, and to define these needs, and 2) to formulate tentative specifications for post-1975 library services. Background work for these major objectives involved searching and reviewing the literature concerned with user studies and specifications for future library services. Consideration was also given to those planning methodologies that would be applicable to the development of future library and information services.

Many earlier studies have attempted to assess the use and users of library systems. Once such study in 1949 described the typical public library user as young, single, well-educated, white, middle-class, and female. Only slightly more females than males were reported to be library users. Later studies confirm that this description provides an accurate picture of library use today. Libraries do serve many users and have a good image in the community. Unfortunately, it remains true that only a minority of all potential users actually use libraries. This is true even for general middle class users who appear to receive better service than other sectors of the population.

This study concentrated on the special needs of identifiable subgroups in the population rather than on the needs of typical users who constitute the bulk of the public library clientele. The following subgroups received particular attention:

- Children and Young Adults
- Older People
- Non-Professionals
- Professionals with Job-Related Information Needs
- Students
- Foreign-Language Speaking (or Reading) People
- American Indians
- Blacks
- Mexican-Americans
- Women
- Rural People
Migrant Workers
Economically and Socially Disadvantaged
Functionally (or Totally) Illiterate
Blind and Partially Sighted
Deaf
Mentally Retarded
Physically Handicapped or Shut-ins
Prisoners

All of these subgroups were identified and studied in terms of single variables, such as age, economic level, or housing location and were found to have information needs somewhat different from the needs of the general population. No effort was made to identify any subgroups in terms of multi-variable descriptions, such as the term "disadvantaged" might imply. This type of multi-variable analysis would be a very useful follow-up study.

Discussions and interviews with other concerned persons, and a review of much of the literature on library objectives, standards, and specifications, resulted in the formulation of some sample specifications, and the following observations:

1. Even with their limited utility for evaluation purposes, it would be worthwhile to continue the effort to upgrade many of the current national standards discussed in this report, expanding their scope, and incorporating the latest thinking regarding the general functions and objectives of public information services.

2. It would not be possible to develop a complete set of meaningful objectives, standards, or specification statements during the course of such a brief effort as this preliminary study.

3. It is very difficult to formulate specification statements that are both general enough to cover most situations, as well as specific enough to be used as a basis for design or evaluation efforts. However, it does seem to be definitely worth the effort to continue the attempt to develop such specifications, at both the local and national levels.

4. The National Commission on Library and Information Science is the appropriate organization to take the lead in this national system planning effort, and is encouraged to do so.
I. INTRODUCTION

This report is the result of an effort to review and summarize the background and activity in several areas of interest for the National Commission on Libraries and Information Science. The results of this effort are tentative, and certainly do not represent a comprehensive review of these areas. However, it is felt that the contents of this report represent a very good starting point for further discussions and attention to these matters.

The report was written to correspond to the tasks given in the work statement for this effort, namely:

1. Review the library/information science literature relating to the objectives or specifications for future (post-1975) library services.

2. Survey and assess planning methodologies and techniques—outside of the library/information science field—that would be applicable to the development of future library and information service objectives.

3. Make preliminary identification of present and potential populations to be served and their specific library and information needs.


Many people participated in the discussion of these topics during the course of this project, and contributed to the findings that are included in this report. Individuals who served as part of the project team, and who contributed heavily to the project findings include:

Victor Rosenberg, University of California, Berkeley, School of Librarianship
Gilda Perolman, University of California, Berkeley, School of Librarianship
Judith Todd, University of California, Berkeley, School of Librarianship
Jo Robinson, University of California, Berkeley, School of Librarianship
Pauline Atherton, Syracuse University, School of Library Science
Marcia Bates, University of Maryland, School of Library and Information Services
Cecily J. Surace, Metropolitan Cooperative Library System, Los Angeles, California.

Except for the sections attributed to other authors, the main body of the report was written by Charles Bourne, drawing heavily upon the contributions of the above individuals.

In addition to the specific contributions of the above individuals, particularly useful discussions were also held with the following people,
to whom we owe our thanks:

Walter Curley, Cleveland Public Library  
Roger Greer, Syracuse University  
Jim Igoe, Hawaii Department of Education  
Diana Ironside, Ontario Institute for Studies in Education, Toronto, Canada  
Don King, Westat Research Corp.  
Antje Lenke, Syracuse University  
Carol Moss, San Francisco Public Library  
Ed Olson, University of Maryland  
Ed Parker, Stanford University  
Keith Reveille, Latin American Library, Oakland, California  
Martin Conlinit, Stanislaus County Free Library

Several useful discussions were also held with a project subcommittee of the National Commission on Libraries and Information Science: Joe Becker, Carlos Cuadra, and Al Zipf; and with Rod Swartz of the Commission staff.
A. INTRODUCTION

This portion of the study concentrated on an attempt to:
1) identify subgroups of the total national population that had information needs significantly different from the needs of the national population in general; and 2) to provide some information about the particular needs of these subgroups.

A special effort was made in this project to focus the project's attention on the identification of subgroups of the general population. This was done in order to determine in what ways the design or evaluation efforts for these groups would have to incorporate different considerations than would be the case for efforts directed at the general population. There was no intention to slight the general population in this study. Concern that the planning of a single omnibus approach, for the design or evaluation of national library service for the entire population, would not be appropriate for a number of major segments of that total population proved well founded. It appears more effective to give design and evaluation considerations to these subgroups separately instead of treating them as part of the entire general population.

Except for a number of studies related to the information needs of scientists and other closely defined populations, studies have emphasized the user needs and use patterns of the general population. The results of these studies are not repeated here, but are summarized in the next chapter by Bates.

The approach taken for this effort was to review the literature relating to use and user studies, talk to other library researchers who were familiar with this topic area, and talk to library administrators and personnel who were working in a wide variety of library and information service situations. The findings of this brief review effort are, by necessity, somewhat general, but still informative, and are summarized in the following sections.

The literature search was initially made using conventional reference tools. Later the ASIS Clearinghouse on Library and Information Science gave helpful assistance to this study by providing some special searches of the ERIC data bases.
B. FINDINGS OF THE STUDY

1. General

It is usually easy to divide the general population into various subgroups according to a variety of perspectives (e.g., age, economic level, educational level, type of employment, etc.). However, in this study it was discovered that it is difficult to use information needs as the determining factor in defining population subgroups. In an attempt to find out which variables are really important or influential, a single variable only was used to define each group. Several subgroups and their special needs were tentatively identified in this manner and they are described in this report.

The reader is probably very aware of the fact that the membership of any such group will not be mutually exclusive. A given individual will usually be included in several of the subgroups named in this report. Most thinking about user groups is in fact usually done in terms of multiple-variable groupings; consequently it is sometimes difficult to think in terms of the effect of each variable, one at a time. For example, we often talk in terms of rather general user descriptions such as "the disadvantaged"; a group which as actually described by combinations of several parameters (e.g. economic level, education level; and perhaps also housing location, job type, and ethnic group). Furthermore, we talk in terms of needs for particular information services as if there were only one single-variable group interested in those services. For example, consider the need for information about social services such as welfare rights or drug abuse information—no single-variable group (e.g. age, economic level, race, housing location) has a monopoly interest in this information service. When confronted with this problem, we tried to isolate the parameters in order to see which ones were most significant. Now that this has been done, perhaps we can turn again to defining groups in terms of multiple variables, but this time with the necessary background information.

2. Information Needs as a Function of Single Variables

A general listing was prepared as Table 1 to show many user groups defined in terms of single variables (e.g. groupings by age or by education level). The suggestions for which variables to use, came from many sources, including prior user studies and other researchers in this field. The choice of what breaks or divisions to make within each group (e.g. the various age levels) was dictated largely by the divisions that were used in the 1970 U.S. Census. This permitted us to not only describe various user groups, but also to give an estimate of how many people were in that group.

After each of the groups and its subdivisions were stated, an attempt was made to identify and describe the information needs of that group and each of its subdivisions. This was done by reviewing the comments that had been made by others about these groups, and by considering a number
**Table 1**

<table>
<thead>
<tr>
<th>Education Level of Potential Patrons</th>
<th>School years completed by Patrons 25 years and over</th>
<th>School enrollment by Patrons 25-35 years old</th>
<th>( \text{Need} )</th>
<th>( \text{Need High} )</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>1.8</td>
<td>3.0</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Elementary 1-4</td>
<td>4.3</td>
<td>El. 1-8</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Elementary 5-6</td>
<td>6.2</td>
<td>33.2</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Elementary 7</td>
<td>4.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary 8</td>
<td>8.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High School 1-3</td>
<td>21.3</td>
<td>HS 1-4</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>High School 4</td>
<td>34.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College 1-3</td>
<td>11.7</td>
<td>College</td>
<td></td>
<td></td>
</tr>
<tr>
<td>College 4 or more</td>
<td>11.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>109.9</td>
<td>57.8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The reference numbers refer to source data citations and at the end of this table.

The term "Better Physical Access" means better access to those who presently experience the general condition. Likewise, the terms "Special" and "High" are all contrast terms, with the needs and services for the general composite population being the norm for persons.
### SPECIAL ATTRIBUTES OR CHARACTERISTICS

What special attributes or characteristics are needed for the information to be processed?

#### Physical Special Needs

- **Access to Physical Collections**:
  - Reading Special
  - Writing Special
- **Use of Materials & Facilities**:
  - Reading Special
  - Writing Special

#### Annual Income:

<table>
<thead>
<tr>
<th>Income Range</th>
<th>1975</th>
<th>1976</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1,000 to $1,999</td>
<td>0.0</td>
<td>0.2</td>
</tr>
<tr>
<td>$2,000 to $2,999</td>
<td>2.1</td>
<td>3.0</td>
</tr>
<tr>
<td>$3,000 to $3,999</td>
<td>4.2</td>
<td>5.7</td>
</tr>
<tr>
<td>$4,000 to $4,999</td>
<td>6.3</td>
<td>7.8</td>
</tr>
<tr>
<td>$5,000 to $5,999</td>
<td>8.4</td>
<td>9.9</td>
</tr>
<tr>
<td>$6,000 to $6,999</td>
<td>10.5</td>
<td>12.1</td>
</tr>
<tr>
<td>$7,000 to $7,999</td>
<td>12.6</td>
<td>14.2</td>
</tr>
<tr>
<td>$8,000 to $8,999</td>
<td>14.7</td>
<td>16.3</td>
</tr>
<tr>
<td>$9,000 to $9,999</td>
<td>16.8</td>
<td>18.4</td>
</tr>
</tbody>
</table>

### Alternative Income:

- **Related Individuals**:
  - $1,000 to $1,999: 1.3
  - $2,000 to $2,999: 2.7
  - $3,000 to $3,999: 4.1
  - $4,000 to $4,999: 6.3
  - $5,000 to $5,999: 8.4
  - $6,000 to $6,999: 10.5
  - $7,000 to $7,999: 12.6
  - $8,000 to $8,999: 14.7
  - $9,000 to $9,999: 16.8

### Total Income:

- **$10,000 or More**:
  - Related Individuals: 20.0
  - Alternative Income: 51.2
### Population Groups

<table>
<thead>
<tr>
<th>Major Occupation of Employed Potential Patron (16 years old and over)</th>
<th>Number of Persons in Group (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional, Technical, and Kindred Workers</td>
<td>10.8</td>
</tr>
<tr>
<td>Managers and Administrators</td>
<td>6.1</td>
</tr>
<tr>
<td>Sales Workers</td>
<td>5.3</td>
</tr>
<tr>
<td>Clerical and Kindred Workers</td>
<td>13.0</td>
</tr>
<tr>
<td>Craftsmen, Foremen, and Kindred Workers</td>
<td>10.0</td>
</tr>
<tr>
<td>Operatives, except transport</td>
<td>9.8</td>
</tr>
<tr>
<td>Transport equipment operators</td>
<td>2.7</td>
</tr>
<tr>
<td>Laborers, except farm</td>
<td>3.2</td>
</tr>
<tr>
<td>Farmers and Farm Managers</td>
<td>1.3</td>
</tr>
<tr>
<td>Farm Laborers and Farm Foremen</td>
<td>0.9</td>
</tr>
<tr>
<td>Service Workers, except private household</td>
<td>8.1</td>
</tr>
<tr>
<td>Private household workers</td>
<td>1.1</td>
</tr>
<tr>
<td>Occupation not reported</td>
<td>0.8</td>
</tr>
<tr>
<td>Total</td>
<td>77.3</td>
</tr>
</tbody>
</table>

### Special Attributes or Characteristics That Distinguish the Information Needs of These Groups

(i.e. What's special about the information needs of this group and subgroup?)

<table>
<thead>
<tr>
<th>Need</th>
<th>Better Physical Access to Facilities &amp; Services</th>
<th>Need Special Physical Form of Materials</th>
<th>Need Special Content of Collections &amp; Programs</th>
<th>Need Special Physical Quality of Collections &amp; Programs</th>
<th>Need High Level of Training</th>
<th>Need More Facilities or Staff and Tools to Accomplish Some Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>This Group's Information</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** The table above lists the special attributes or characteristics that distinguish the information needs of different population groups. The 'X' marks indicate the specific needs or attributes that are relevant for each group.
5. PMRTATION GROUPS

Need High
Better
Need

NUMBER OF PERSONS IN GROUP

(only those patrons would be included in this group)

SPECIAL SERVICES OR COLLECTIONS THAT DIFFERENTIATE THE LIBRARY FROM OTHER LIBRARIES

- Access to Physical Facilities
- Education of Special Collections
- Special Services
- Other

INFORMATION NEEDS (what's special, % of total)

PATRON

Recreation or leisure information & activities
Special to formal educational programs (elementary and high school)
Special to formal educational programs (vocational training)
Special to formal educational programs (college level)

- Information & self-instruction
- Educational & self-instruction
- Social services, consumer, current awareness information

FORM OF INFORMATION

Physical Facilities
Collections
Special Services
Materials & Programs

SPECIAL ATTRIBUTES OR CHARACTERISTICS THAT DIFFERENTIATE THE LIBRARY FROM OTHER LIBRARIES

PERSONALITY OF LIBRARIAN

STAFF QUALIFICATIONS

- Access to Physical Facilities
- Education of Special Collections
- Special Services
- Other

INFORMATION NEEDS (what's special, % of total)

PATRON

Recreation or leisure information & activities
Special to formal educational programs (elementary and high school)
Special to formal educational programs (vocational training)
Special to formal educational programs (college level)

- Information & self-instruction
- Educational & self-instruction
- Social services, consumer, current awareness information

FORM OF INFORMATION

Physical Facilities
Collections
Special Services
Materials & Programs

SPECIAL ATTRIBUTES OR CHARACTERISTICS THAT DIFFERENTIATE THE LIBRARY FROM OTHER LIBRARIES

PERSONALITY OF LIBRARIAN

STAFF QUALIFICATIONS
### Population Groups

<table>
<thead>
<tr>
<th>Language Skill of Potential Patron (Other Tongue)</th>
<th>Native-born</th>
<th>Foreign-born</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>159.0</td>
<td>1.7</td>
</tr>
<tr>
<td>French</td>
<td>2.2</td>
<td>.1</td>
</tr>
<tr>
<td>German</td>
<td>4.9</td>
<td>1.2</td>
</tr>
<tr>
<td>Polish</td>
<td>2.0</td>
<td>.1</td>
</tr>
<tr>
<td>Russian</td>
<td>.2</td>
<td>.1</td>
</tr>
<tr>
<td>Yiddish</td>
<td>1.2</td>
<td>.1</td>
</tr>
<tr>
<td>Italian</td>
<td>3.1</td>
<td>1.0</td>
</tr>
<tr>
<td>Spanish</td>
<td>6.1</td>
<td>1.7</td>
</tr>
<tr>
<td>All other</td>
<td>5.7</td>
<td>2.5</td>
</tr>
<tr>
<td>Not reported</td>
<td>9.2</td>
<td>.1</td>
</tr>
<tr>
<td>Total</td>
<td>193.6</td>
<td>9.6</td>
</tr>
</tbody>
</table>

**Note:** Mother tongue is defined as the language spoken in the person's home as a child.

---

### SPECIAL ATTRIBUTES OR CHARACTERISTICS THAT DISTINGUISH THE INFORMATION NEEDS OF THESE GROUPS

(i.e. What's special about the information needs of this group and subgroup?)

<table>
<thead>
<tr>
<th>Need</th>
<th>Level of Training</th>
<th>Need Special Services</th>
<th>in Use of Access Tools</th>
<th>Facilities or Staff Are Very Involved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Better</td>
<td>Special Content of Collections</td>
<td>Physical Quality of Facilities</td>
<td>Collections and Tools To Access State Law</td>
<td></td>
</tr>
<tr>
<td>Need</td>
<td>Need Special Physical Facilities</td>
<td>Content of Collections</td>
<td>Physical Needs</td>
<td>Level of Training</td>
</tr>
<tr>
<td>Special</td>
<td>Access to Physical Facilities</td>
<td>Form of Collections</td>
<td>Physical</td>
<td>Need</td>
</tr>
<tr>
<td></td>
<td>&amp; Services</td>
<td>Materials &amp; Programs</td>
<td>Facilities</td>
<td></td>
</tr>
</tbody>
</table>
### Ethnic Background of Potential Patrons

#### Population Groups (millions)

<table>
<thead>
<tr>
<th>Race</th>
<th>Number of Persons</th>
</tr>
</thead>
<tbody>
<tr>
<td>European</td>
<td>177.7</td>
</tr>
<tr>
<td>Negro</td>
<td>22.6</td>
</tr>
<tr>
<td>American Indian</td>
<td>.8</td>
</tr>
<tr>
<td>Japanese</td>
<td>.6</td>
</tr>
<tr>
<td>Chinese</td>
<td>.4</td>
</tr>
<tr>
<td>Filipino</td>
<td>.3</td>
</tr>
<tr>
<td>All other</td>
<td>.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>203.2</strong></td>
</tr>
</tbody>
</table>
### Population Groups

<table>
<thead>
<tr>
<th>Housing Location of Potential Patron</th>
<th>Number of Persons in Group (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Cities</td>
<td>63.8</td>
</tr>
<tr>
<td>Other urban</td>
<td>29.2</td>
</tr>
<tr>
<td>Rural non-farm</td>
<td>14.1</td>
</tr>
<tr>
<td>Rural farm</td>
<td>2.3</td>
</tr>
<tr>
<td>Total Metropolitan</td>
<td>139.4</td>
</tr>
<tr>
<td>Urban</td>
<td>26.3</td>
</tr>
<tr>
<td>Rural non-farm</td>
<td>29.2</td>
</tr>
<tr>
<td>Rural farm</td>
<td>8.2</td>
</tr>
<tr>
<td>Total Non-metropolitan</td>
<td>63.7</td>
</tr>
</tbody>
</table>

### Special Attributes or Characteristics that Distinguish the Information Needs of These Groups

(i.e., what's special about the information needs of this group and subgroup?)

<table>
<thead>
<tr>
<th>Need Better Physical Access to Physical Facilities Form of &amp; Services</th>
<th>Need Special Content of Collections</th>
<th>Need Special Physical Materials &amp; Programs</th>
<th>Need High Level of Completeness and Quality of Collections</th>
<th>Need More Training</th>
<th>Need Special Services and Facilities or Staff Are Very Hard and Tough to Access</th>
<th>This Group's Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Sources


2. Ibid., Table 75: Years of School Completed of Persons 25 Years Old and Over by Race and Sex: 1940 to 1970. p. 1-368.


5. Ibid., Table 85: General Characteristics by Race for Urban and Rural Residence. p. 1-380.


of key questions while reviewing the available information about the needs of each group and its subdivisions. The result of this analysis is summarized in this table. At this time, this data represents primarily a number of suppositions and hypotheses, and not a final detailed tabulation of what is known about the needs of these groups—however it represents a good starting point for further discussion and data collection.

The major test applied to all subgroups for this table was the question, "What is special about the information needs of this particular subgroup? In what way does this group have information needs that are different from the needs of the general population?"

Each of the defined groups is described below, along with some statements about the needs that are special for this group.

a. **Age of Potential Patron**

Age has been shown to be a good predictor of the extent of library use by an individual. The individual's age is apparently a major factor in the extent and way in which that individual makes use of information services. Information needs of individuals of preschool age for example are significantly different from the needs of the older citizens. We know something of the needs of children from preschool through the young adult age, and know that the needs are clearly different for the age groups at the ends of the age spectrum; however, we do not have much precise information about how the information needs vary with the age of the individual over the middle range of ages. The needs shift at all ages, but more rapidly and markedly at the ends of the age spectrum.

The extensive A.D. Little study of the users and non-users of the San Francisco Public Library System reported the following findings about the ages of the non-users:

...the most startling figure is the 91% of persons over age 60 who do not avail themselves of this free public service, especially at a time of life when they might be expected to make creative use of its resources for the enjoyment of increased leisure time. 85% of retired persons do not use the library system. These facts are all the more perplexing because it has been found that of all age groups, people over 60 are most likely to find what they are looking for when they go to the library!

It emerged from these discussions that the problems are of service and "library outreach" rather than facilities or resources. The elderly need positive encouragement and practical assistance. The library must come to them; they frequently cannot go to it because of physical disability or because of attitudes or habits of a lifetime. Some are afraid of fines or reprimands for returning books late or misplacing them. Special programs and specially trained personnel are needed to overcome these fears... these programs will become increasingly important in the urban center city as the elderly population increases. (A.D. Little,
This same study reported the following estimate (p. 103) of the percentage of each age group that was a library non-user:

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>Percent of Population Not Using Library System</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>100.0</td>
</tr>
<tr>
<td>5 - 12</td>
<td>85.5</td>
</tr>
<tr>
<td>13 - 18</td>
<td>41.5</td>
</tr>
<tr>
<td>19 - 25</td>
<td>50.9</td>
</tr>
<tr>
<td>26 - 40</td>
<td>57.5</td>
</tr>
<tr>
<td>41 - 60</td>
<td>81.5</td>
</tr>
<tr>
<td>60+</td>
<td>91.0</td>
</tr>
</tbody>
</table>

This study also noted (p. 60) that:

The branches provide library resources for the young and elderly, who find it more difficult and expensive to travel to the main library—and generally have less demanding needs for in-depth, comprehensive library service. The main library, on the other hand, serves the more specialized needs of the middle-productive years.

The pre-school age group is characterized by a need for materials that are special in content and form, a need for access to the facilities, special staff assistance, and a need for special physical facilities (e.g. smaller chairs and tables). Children in the age group 5-9 years have somewhat the same needs as preschoolers. A recent Rand Corporation study of the Beverly Hills (California) Public Library reported that:

If the head of the household is under 25, all other things being equal, the household is 18 percentage points less likely to have a (library) card than if the household is headed by someone between 25 and 64; and if the head is 65 or over, the household is 12 percentage points less likely to have a card. (Newhouse, p. 55)

However, the same study also noted that:

Variables not entered (into the equations), such as age, are not significantly associated with use. (Newhouse, p. 57)

The senior age group needs are characterized primarily by a need for improved physical access to the facilities or services; this is because a large fraction of the elderly population is reluctant to use public transportation facilities, cannot easily walk to the facilities, and may not have ready auto transportation. Furthermore, persons of retirement age generally no longer need any job-related information services or in-depth research collections.
b. Education Level of Potential Patron

The individual's achieved level of education is another major variable influencing the extent and way in which the individual makes use of information services. Individuals who have learned to use the information "system" to their advantage during their periods of formal education are likely to continue to use these facilities. Thus the more educated individual is more likely to use the information services than is the less educated individual. The Beverly Hills study reported that:

A household headed by an individual with 4 more years of education than the head of another household will, other things equal, only average two more visits (to the library) per year. (Newhouse, p. 57)

Little is known in detail about the way in which the need changes as a function of education and the change might be strongly influenced by other secondary factors such as type of employment.

One distinguishing feature (generally true, but with some exceptions) of the needs of the patrons with a college-level education is their more likely need for information in greater depth, completeness, currency, and quality, than might be required for patrons with less education.

One distinguishing feature of people with a relatively low level of education (e.g. adults who did not complete elementary school) is the fact that they are generally unfamiliar with libraries or how to make effective use of any such information services. This group would seem to have a need for training in ways to make better use of such services and facilities, or perhaps the facilities should repackage or modify their services to more closely match the needs and information seeking skills of this group.

Adults with a low level of formal education (e.g. 4th grade) have a need for special reading materials and programs, and may need some assistance and training in the use of the facilities and tools. As noted by Hiatt in a Public Library Association report:

Reaching the undereducated will call for different service policies and a differently trained staff from those which have become traditional. (Public Library Association, p. 9-10)

The Dallas Public Library program for the adult new reader found that special materials were required for this user group:

The library's program, like the others observed, shows that the crucial need is for more and better materials. (MacDonald, p. 27-28)
c. Economic Level of Potential Patron

There appears to be some relationship between specific information needs and the income level of the individual. It has been suggested, for example, that low income persons are more likely to be interested in some special information services that may not be a part of many traditional libraries (e.g. information on welfare rights, food stamps, employment and housing opportunities); furthermore, these individuals may not be able to afford the transportation costs to get to the information facility, and may need more assistance and training in the use of the facilities and tools. As noted in one report of a library effort aimed specifically at service to poverty areas:

To reach poverty areas in a rural situation, the first priority is inability...appropriate material for poverty areas (English and Spanish) does not seem to be available. The key to what is appropriate is practicality --food buying and selecting, making of clothes, gardening, self-improvement, such as better English...Entertainment or escape literature is highly in demand...(Ochoa).

Persons at the high end of the economic level may make slightly less use of public libraries. The Beverly Hills study noted that:

If book expenditure (by household) is held constant, households with higher incomes are only slightly less likely to use the library; a $25,000 difference in income will result in an annual reduction of one library visit. (Newhouse, p. 57)

d. Type of Employment of Potential Patrons

Some of an individual's information needs are directly related to his type of employment. Several types of employment (e.g., professionals) seem to generate job-related needs for information. Professional, and perhaps managerial and administrative job-related information needs usually make special demands on the collection (e.g., content, currency, completeness, or in-depth coverage), and may also pose special requirements for reference services. Examples of special services established in several public libraries in response to these needs are law libraries, business and industry libraries, patent collections, and subscriptions to specialized indexing and abstracting services.

There have been some indications that the information services to industry are less than adequate, as noted in the following comments by Pfoutz:

There is no question that public library service to industrial users falls short of the desired goals of supplementing the resources maintained by industry itself. The depth and breadth of informational media required to support production, research, and development activities are generally lacking in public libraries.
Collections of inadequate size and unsatisfactory composition, an obvious inability to meet industrial needs locally, an abdication of public library service to other organizations, and the informal opinion of a majority of department heads themselves all point to the conclusion that service to industry in all but the largest public libraries is far from satisfactory. Only a handful of public libraries in this country are providing materials and services which even begin to meet the needs of industry.

Similar comments were made by Holt after an intensive study and pilot effort in California concerned with the information needs of people in business and industry:

During the past two decades, public libraries have launched numerous outreach programs intended to reach the "unserved" in our society. At least one group has been largely overlooked in this missionary effort--the businessman! While they may not qualify as "deprived" in the socio-economic sense, representatives of business and industry constitute a significant group whose unfilled information requirements must place them in the vanguard of the "unserved". (Holt, p. 2)

The prior comments echoed similar earlier comments by Bonn:

...but judging from a careful reading of the literature of the past two decades, service to business and industry never really has been satisfactory, either to outsiders or to the librarians. (Bonn)

These deficiencies are reviewed, and re-stated as needs by Meyer and Rostvold:

The combination of limited internal information resources on the one hand, and limited manpower or expertise in information-gathering on the other, points quite unmistakably to a vital function that the public library can and should serve for the well-being of its community. It should take unto itself the role of being the "company library" for that great majority of firms that do not have special libraries of their own. (Meyer and Rostvold, p. 122)

Farmers have job-related needs for information, in addition to their general interest needs, as noted in the following comments by Bonser:

1. Farmers avail themselves of little that the libraries offer. Originally this was due to ignorance and resistance to change. Now farmers do not use books on agricultural matters because by the time a book is published the material is often obsolete. Farmers devour
current periodicals and information about experiments and need to learn of the latest findings the moment they are available.

2. There seems to be hope that libraries will become a major information source for farmers. The channel of information is currently through the county extension office and will stay there.

3. For information other than technical (social, government function, and the like) the farmer will use the library the same as other people.

4. One farmer commented that he had been using the State Library for general reading for 20 years and that its service by mail was superb. (Bonser, p. 100)

Non-professional workers appear to have a much smaller number of job-related information needs to be considered. Blue-collar workers do not appear to generate many job-related demands for services. The A.D. Little study of the San Francisco Public Library noted that:

...the only occupational categories using the library less than the retired are blue collar, service, and sales-clerical workers, an estimated 92% of whom never use any part of the Public Library System...

Many of the San Francisco blue collar workers are skilled, with a high school or technical education and with family income sometimes ranging up to $20,000 per year. This segment of the labor force can afford other forms of entertainment. Television is a prime demander of their attention.

It seems clear that the library has more to offer the less skilled persons in these occupational categories, especially the poor and minority groups, where the library has traditionally been most successful—reading for self-education and career advancement (A.D. Little. Development Alternatives, p. 104)

This same study (p. 105) tabulated the estimates of the percent of the San Francisco non-user populations by occupational status:

<table>
<thead>
<tr>
<th>Occupational Status</th>
<th>Percent of this Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blue Collar</td>
<td>92.0</td>
</tr>
<tr>
<td>Sales--Clerical</td>
<td>81.6</td>
</tr>
<tr>
<td>Professional--Managerial</td>
<td>58.9</td>
</tr>
<tr>
<td>Housewife</td>
<td>74.5</td>
</tr>
</tbody>
</table>
Further comments about the information needs of labor unions and their members are given in a recent report by Bonser:

Union management, at the local and regional level, depends the most heavily upon the resource and staff research facilities of the national or international offices. The AFL-CIO also provides much information in a similar manner. A third important source of information consists of public agencies, such as the Social Security Agency, that furnish a great deal of information upon request. In addition, educational programs for union management are carried on by unions at the regional level, and many unions actively participate in the extension programs at Indiana University.

The typical union member does not depend heavily upon outside sources of information. Almost all of his technical education is provided by his apprenticeship or on-the-job training.

The libraries are used in varying degrees by union management, but they cannot be considered an important source of information. Much of the use that does occur takes place in the larger cities of the state. The libraries are virtually unused as a source of professional information by union members, although they may be used for pleasure reading...

Another criticism is that the libraries have not shown any notable interest in organized labor. Most libraries do not even have labor-related materials. (Bonser, p. 102-3)

Unemployed persons who are trying to obtain employment may have a special need for current information regarding job opportunities, training programs, unemployment benefits, and welfare services; they may also be interested in some materials to help them identify or learn more about various careers.

c. Source of Information Need

As discussed in the previous section, job-related information needs are important to some groups. There are also many users with information
needs that derive directly from formal educational programs. Much of
the use presently made of public libraries is in direct support of
academic programs at all levels. As noted in the A.D. Little study
of San Francisco Public Libraries:

The current student respondent patronage pattern favors the branches through junior high school, but
shifts noticeably toward the main library for high
school students and those participating in higher
education...

The branches, more numerous and conveniently located
near home and elementary and secondary schools
throughout the city, are in greater demand by students
through the junior high school level. However, as
indicated above, as more complex and in-depth materials
are needed to supplement the curriculum materials of
school and college libraries, more high school and
college students use the resources and services of the
main library. (A.D. Little. Development Alternatives, p. 63-64)

There has been a continuing discussion over the years regarding the
relative roles of the school libraries and the public libraries. In some
communities these functions have been merged in joint community-school
facilities, with plans to make all new facilities in those communities of
the same joint-function type where possible and appropriate.
Different thinking about the role of school libraries is given in the
following extract from a report by the New York University School of
Education:

The public library cannot replace or substitute for
the school library. All communities lacking school
libraries should work toward their establishment. Educa-
tional programs for adults as well as children should be
the responsibility of the schools. The library can, how-
ever, supplement programs by the schools, and should work
with the schools to develop long-range policy. Such
services as providing study areas for school children or
a location where non-library staff (for example, univer-
sity students) could tutor children after school would
be appropriate. (New York University; School of Educa-
tion, p. 12)

The needs that arise from formal academic programs relate mostly to the
content of the collection (the specific titles as well as required duplic-
ate copies or reserve reading arrangements), but these programs also
generate some needs regarding the physical facilities (e.g., a need for
large amounts of student study space). Information needs that stem from
support to the college-level academic programs include a need for a more
current, comprehensive, and in-depth collection. New academic programs
such as the "open university" and the "extended university" that are now
being tried and discussed will probably add to the need for information
support to these formal academic programs, particularly since many of
these programs call for the college-level work to be done away from the
colleges, but using local library resources and services.

There is an increasing awareness of a need for services to provide
information regarding community or social services and aid to the individual.
Examples of such information needs are requests for information regarding
food stamps, welfare rights, drug abuse and crisis counseling, tenant unions,
consumer information, and job opportunities.

One of the most frequently asked for categories in
a library is the cost of living in a city, a state,
or some other area. (Fetros)

Hundreds of special information centers have been established over the
last several years. Some are centered in the libraries, but many function
outside of the regular library systems. The operation of such information
service centers is given in the following account:

After talking to many operators and users of community
information centers, we concluded that there were two
quite different styles of operating. One of these was
called "service-centred", the other "person-oriented"....
"Service-centred" information outlets tend to be more
concerned with efficient functioning of our current
social and economic systems than with the well-being of
the people such systems are intended to serve.

In contrast, "person-oriented" information centers
tend to see persons and their communities as the central
focus of their concern. They tend to be more informal in
character; they are more likely to be run by volunteers
than by paid professional staff, although professionals
who are prepared to step beyond the ways of thinking
imposed by their professions are also attracted to such
centers. They are quite often temporary centers, arising
in response to emerging needs and feeling no particular
desire to maintain their existence when the need appears
to have been filled. Rather than dealing with enquiries
according to the dictates of "professional" ways of doing
things, they tend to handle, in inventive and in human
rather than mechanical ways, whatever problems, interests
and concerns their users bring to them. They are more
likely to help people to help themselves—to organize their
own services or develop their own resources rather than
merely to refer to the appropriate government or institu-
tion whatever evidence they accumulate as to the need for
some new service....Where the information being requested
is not known to the operators, both operators and users
work together to find a way to obtain that information.
(G. Stewart)
There are of course alternate models for newer information services. However, there is no data yet to suggest that the need for these special information services is identified with any particular subgroup (e.g., disadvantaged). It may be that all population segments have a need for this type of service.

Finally, there is a need for information services for the individual who is interested in self-instruction or self-improvement. However, this need seems to apply to all segments of the population rather than to any particular subgroup.

f. Language Skill of Potential Patron

Persons with no English-language skills have a special need for information materials in their own language. Furthermore, they probably need special assistance with the catalog and other reference tools. They may also need some assistance in learning how to use the facility.

People who have English as their second language may also want and need to have some of the facility's collection in their first language. As one librarian in a Spanish-speaking library put it:

> What do speakers of Spanish want as reading material?... It has been rather difficult to secure what was needed, but books on, of, and about Mexico are now becoming more available in this country through very reliable sources in San Francisco and Los Angeles. (Salazar)

The need for special access tools is noted by another author:

> The need for bilingual textbooks and reading materials is essential. Special bilingual card catalogues should be developed to assist patrons in finding materials. (Hispano Library Service, p. 38)

One California experimental service for rural Spanish-speaking populations used a special bookmobile (Stevens):

> With its many accessories, the Biblioteca Ambulante served 33 locations, including ranch labor camps, small Mexican communities, and OEO migrant labor camps. In serving these areas, it was necessary to deAnglicize the library. This was achieved by simplifying registration and circulation procedures, building an experimental Spanish collection, and employing local bilingual Mexican-American staff members....From its cargo of 'something for everybody' the bilingual extroverted staff dispenses books, magazines, comics, records, and miscellaneous library materials selected to meet the taste and language requirements of their patrons...the biggest problem encountered...this year has been the acquisition of Spanish books. Requests for specific titles, many of them out-of-print, the need for materials printed in Mexico rather
than in Spain, and the inadequacy of translations of English best-sellers are evidence of increased demand.

g. Ethnic Background of Potential Patron

The library and information needs of several ethnic groups have received concentrated attention recently as part of increased awareness of the problems of the disadvantaged. Several of the studies made to date of the information services and needs of some of the ethnic groups have made a number of suggestions of services that should be provided. However, many of the suggested services would be useful, and of interest to any patron group, and are not needs that are unique to any individual ethnic group.

With respect to the relative use of library facilities as a function of the patron's ethnic background, the San Francisco Public Library study found that:

...with respect to citywide distribution, Caucasians make greater use of the main library than do Negroes and Orientals. (A.D. Little. Development Alternatives, p. 65)

One group that does seem to have some unique needs are the American Indians, particularly the ones living on reservations. The following comments from a recent study are appropriate (Sargent):

Many books tell the story of Indian education, both in fictional and personal form and in facts and statistics, without ever mentioning the word 'library'. But in reading these books, and realizing the enormous problems of illiteracy among Indians, the lack of libraries is seen as a perfectly understandable phenomenon. There have been no libraries for Indians because there were no books in Indian languages to put in them, and no one to read them in English.

According to U.S. Bureau of Indian Affairs statistics, in 1969 there were 178,476 Indian students, ages 5 to 18 years, inclusive, enrolled in public, private, Federal and mission schools...The dropout rate of Indian students is so high, and so many children are not reached at all, that the average years of schooling is 5.5, well behind that of both the black and the Mexican American. The birthrate of Indians is 2-1/2 times that of whites, and a majority of Indians are under 20 years old, so the problem is increasing daily...Poverty is also a factor in the educational problem. A people whose average income is only $1,500 a year has little to spend on books.

The language problem is the real barrier to library service for Indians. There are no books in Tiwa, Tewa, Town, or Keren, the language of the Pueblo Indians. Until the white man invented it, the Indians had no written language. The majority of Indians do not read either Spanish or English...
Books in Spanish and in English must be found or written that are easy to read yet mature enough in content to interest teenagers and adults. The New Mexico librarians found the reading interests of the Indians much the same as that for other populations.

The Navajo Reservation, about the size of the state of West Virginia, except for bookmobile services mentioned earlier, is without libraries. (Sargent)

One observation that emerges from reviewing all of this material and activity from the point of view of the single variable, ethnic background, is that with the exception of the American Indians, there does not appear to be any evidence to suggest that there are any needs for information services that are unique to any individual ethnic group. The American Indian group has special needs because of the combination of so many coincidental problems working against them (few materials in the native language, low average education level, unfamiliarity with services and tools, geographically restricted access to the facilities and services, low income level). Other ethnic groups have some of these problems, but not all at the same time.

There is a need for special materials, programs, facilities, and staff to reflect the history, culture, and interests of the potential patrons to be served by any particular library. However, this is a need that exists independently of what ethnic group is to be served by that library.

One indication of the relationship of the content of the collection to the ethnic background of the clientele population is given by the following comments:

Proper selection of materials can transform a stereotyped library into a cultural media center. This would be extremely effective in the Southwest where libraries could incorporate an emphasis on the Spanish culture... the library could improve the self-image of the Hispano by changing the attitudes of Anglos. Collections should include not only materials with which the Hispano can relate, but also materials for use by Anglos. Films, books, records should stress the true unslanted history and culture of all the Southwest. (Hispano Library Service, p. 37-38)

h. Housing Location of the Potential Patron

People living in rural areas may have a need for better access to information services than they now have. They may also require some improved information access techniques such as bookmobiles and mail-order or telephone-order library services. Rural patrons who happen to live on farms may also need access to material that is related to the special interests and problems of farm life.

People living in many remote areas of this country do not have meaningful access to library facilities and services. As noted by Molz:
Paradoxically, the United States is caught between two extremes: on the one hand, national informational needs especially in such fields as medicine and aeronautics, are met by the most sophisticated bibliographical apparatus; on the other, a number of communities in remote areas have as yet no mechanism to promote the free exchange of books and information. (Moltz, 1970)

Within cities, studies of public library services have indicated that even within a city, the distance a person lives from the library, measured in true distance or in travel time, strongly influences that person's likely use of the library. In some cities, there are indications that even the public transportation costs are too high for many people to pay to go to the library; however, this factor is a combination of both housing location and economic status. One study of the users of New York Public Libraries found that:

While it is difficult to determine the intensity of use of the library at different distances, it is easy to find where the users live. Very few libraries drew more than 10 percent of their users from more than 10 miles. Only four libraries in the survey did this, and they were all central libraries in the central cities of metropolitan areas. (New York (State) University, p. 127)

Reviews which have considered the needs of inner city populations have noted, usually indirectly, the multiple-variable needs of inner city residents. For example:

...reading skills are limited for a sizeable proportion of the inner city community,...The sensitivities of a "rejected" population tend to, in turn, reject materials with a middle class point of view. Films, recordings, tapes, photography, as well as print, must be designed for varied backgrounds and psychological orientations, focusing on varied aspects of problems and reflecting the range of needs on any of the major topics of concern. (Monroe)

The migrant farm worker has problems of physical access to the services, and the establishment of eligibility for library services. The migrant workers often have a literacy problem, both for English and for Spanish, and this calls for some special materials and services, and for assistance and training in the use of the facilities and resources. Furthermore, many in this group are generally unaware that libraries or information centers are available to them, or can be of some assistance to them. Workers and their families who have come from Mexico are often unfamiliar with the concept of the free public library. Because of recent training programs during recent years, many of the migrant children have a higher level of educatic than their parents and have interests in different kinds of reading material. The present national migrant population, estimated at about 300,000, consists of several major ethnic groups: primarily Chicano or Mexican National in the West Coast and Middle States, and partially Mexican, but primarily Puerto Rican and blacks in the Eastern States. There are few white migrant
workers now, and the total migrant population is decreasing as more and more agricultural operations become mechanized. The needs of this group have probably not been met adequately to date. Local communities and state agencies are apparently doing relatively little for these people. Most of the information programs provided for this group are supported with federal funds. There is the attitude by some local agencies that these people are primarily transient non-taxpayers, hence the local community has no obligation to provide service to them.

Initial studies indicate that most of the migrant population in several states does not have access to library services. Some of these comments are repeated below from a recent article by Jarvella:

That libraries are ill equipped to deal with the migrant's needs is evident. As a rural dweller, the migrant will often not be eligible for free borrowing privileges because of his non-residency and the temporary duration of his stay....In many instances, this kind of service is simply not economically feasible or else there is no assignment of responsibility for serving a particular rural area. In this case, only the most aggressive demands will result in service. The migrant is not likely to be vocal about a service whose value is unknown to him. To serve the migrant is to make available mostly nonprint materials. There is a need for easy-to-read presentations of subjects and for Spanish language books and magazines; yet, these are among the most difficult materials to supply, especially from the more meager resources of rurally situated libraries. (Jarvella)

Further comments about the migrant needs are given by Martinez:

Since the migrant people are reluctant and find it difficult to use the traditional library services, the Biblioteca is used enthusiastically. The children are anxious to carry home books in Spanish and English: easy readers, the Golden Books, the Elf Books, Dr. Seuss, Eastman, Scarry, and many more, mainly in paperback. For the intermediate reading ages there are Charlie Brown books, Dennis the Menace series, teen-age romance stories, and sports literature. For the young adult and parents the Biblioteca provides graphic novels (with cartoon-like drawings), information manuals on child and infant care, birth control information, cooking books, sewing and knitting books, an encyclopedia in Spanish, dictionaries, English self-taught manuals, various periodicals and a daily paper in Spanish. (Martinez)

As mentioned earlier, the American Indian living on the reservation has a severe combination of problems: physical access to services, few Indian subject matter collections, and very little published Indian-language material.
Persons confined to prisons, convalescent hospitals, and other institutions, have special problems due to their "housing location," and these are discussed in a later section.

In summary, aside from access problems or the availability of some special materials, and with the exception of the migrants and the reservation Indians, there do not seem to be special information needs that are directly related solely to the location of a person's housing.

1. Handicapped and Institutionalized Potential Patrons

It is clear that persons with any of several specific types of handicaps have distinctly different needs, primarily with regard to access to and the format of the materials. For example, persons with a reading skills handicap (e.g. illiterate, new adult reader) might require some special types of material (e.g. adult-level stories written for a low reading level). These people may also need some assistance and instruction in the use of the facilities and services.

Persons who are blind or nearly blind will need their materials furnished in different forms (e.g. books in braille, talking books, books in large type), or may need some special physical arrangements or considerations at the facility, and will need some assistance in the use of the catalogs and other resources of the facility.

Deaf persons, or persons who are both deaf and mute, sometimes have difficulty communicating with the library staff, and have a need for staff members who can converse with them in sign language, or can converse with deaf persons who talk in a somewhat different way because they have never been able to hear anybody else talk.

Mentally retarded persons probably need more instruction on the use of the facilities, and may need some staff assistance. It might also be necessary to provide some special materials for these people.

Persons who are physically handicapped in some way other than vision (e.g. those requiring the use of a wheelchair) may require some special consideration in the provision of the physical facilities, and may have problems in getting to the facilities, but probably do not have any other information needs that are different from the rest of the general population.

Persons with any kind of physical or mental illness may have a need for some material with special content. Recent emphasis on choosing information materials in a way that supports the individual's therapy program (i.e. bibliotherapy) is an example of attempts to fill these needs (Tews).

Individuals who are institutionally confined (e.g. hospitals, nursing and convalescent homes, prisons) clearly have a special need for access to materials. Special arrangements are needed to bring them to the materials (e.g. busing plans), or to bring the materials and services to them (e.g. bookmobiles, mail-order service, volunteer visits).
institutionally-confined usually do not have recourse to any alternative information services. The shut-ins who are restricted to private homes have much the same needs.

Persons in some types of institutions may require different types of material than the persons in other types of institutions. For example, prison inmates are very interested in obtaining access to legal reference materials. Prisoners have legal problems in three main areas: 1) post-conviction relief (litigating their sentences); 2) civil problems (divorce, child custody, welfare payments, loan payments); and 3) mistreatment or abridgement of institutional rights in prisons. Most prisoners are poor and cannot afford a private attorney to defend them; furthermore, few volunteer attorneys are available. Consequently, the prisoner's only choice is to do the legal work himself.

As summarized by Molz:

If such programs [public defender service or the members or faculty of a local bar association or law school] make their resources and assistance available to prisoners, are not available (and they are often not), then the correctional system must provide sufficient access to legal research materials so that the inmate or his jailhouse lawyer (the so-called "writ-writer") is able to prepare the petition. (Molz 1972)

The success of the inmates' own legal reference work is noted by MacLeod:

Can prisoners who have not attended law school use law books to advantage? This question is answered by the many important cases they have won over the years, often in the area of prisoners' rights. (MacLeod)

Prison populations generally have different reading interests than the general population. As reported by a librarian who brought a bookmobile to a county jail for the first time:

We immediately discovered that our collection of 3,000 volumes, of which half are children's books, was totally inadequate to handle the diversity of interests expressed by the men and women who visited us. (M. Stewart)

Another report of inmate needs mentioned:

Most requests are for fictional material, with noticeable demand for Ayn Rand and James Baldwin, although many requests are for non-fiction work, particularly information involving the California Penal Code and magazines which discuss proposed changes in the death penalty and other aspects of current penology. (Dolby)
j. Other Possible Groupings of Potential Patrons

It is quite possible that there are other useful ways to group the users according to a single variable. Some such groups are mentioned here for further consideration and discussion. Consider, for example, households with a child living at home versus households without a child living at home. A recent Rand Corporation study of the Beverly Hills Public Library reported that:

By far the most important factor in explaining variation in cardholding and (library) use across households is the presence or absence of a child living at home. (Newhouse, p. 53)

Another possible grouping might be those households that spend more than X dollars per year for books and other publications compared to those that spend less.

New immigrants are a group of people who definitely need to be introduced to the information facilities and services, and need assistance and training in the use of the facilities and services. They probably have problems with the English language and thus need some special materials and also need special information to assist in such things as the location of jobs and housing, and familiarization with a new culture. They are often unaware of the available services, and even if they do know of them, they are often unaware and inhibited in the use of the facilities or services.

Gifted children of pre-college age may have a need for attention and service that might be different from what they currently receive. In some libraries the younger children may be denied access to the adult collections or services, and thus may not be provided the information or services that they are interested in. On an adult level, the gifted or exceptional people (the intellectual leaders or decision makers) who pursue many interests and may be responsible for many changes in our society (e.g. activity in consumer or conservation groups) may also need information services to support their activities, and they may turn to the public library facilities for this support. The needs of this "change-maker" group might be worthy of special consideration.

3. Clearly Identified Subgroups with Special Needs

Many different single-variable groups were considered during this study. The few that appeared to have information needs that were clearly different from other groups, and from the general population, were noted for further consideration and study, and are listed and described in summary form in Table 2. These groups are felt to be deserving of more careful study and consideration as special user groups.
Table 2

Clearly Defined Population Groups With Special Needs

<table>
<thead>
<tr>
<th>Name of Group</th>
<th>Special Information Needs of This Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Young Children</td>
<td>This group has needs for better physical access to the facility, a collection with somewhat different physical form, format, and content; a lesser need for complete and current collections (a relatively small collection is generally adequate); special physical facilities and furniture, special staff assistance, and training in the use of the facility.</td>
</tr>
<tr>
<td>Older Persons</td>
<td>This group needs better access to the facilities and services.</td>
</tr>
<tr>
<td>Professionals with Job-Related Information Needs</td>
<td>In order to support their professional efforts, this group has a need for collections that are more complete, current, and in-depth than are required for the general public (e.g., law libraries, patent collections). They may also need special access tools or staff assistance.</td>
</tr>
<tr>
<td>College Students</td>
<td>In order to support their academic programs, this group needs more complete, current, and in-depth research collections than are required for the general public. Public libraries generally provide inadequate service to this group.</td>
</tr>
<tr>
<td>Vocational Training Students</td>
<td>This group needs special materials in the collection, and may presently be receiving inadequate support from libraries.</td>
</tr>
<tr>
<td>Persons With No English-Language Skills</td>
<td>This group has a need for material in their native language, and may need instruction and assistance in the use of the facility and its tools. Present services to this group are generally considered inadequate.</td>
</tr>
<tr>
<td>Reservation Indians</td>
<td>The needs of this group have probably never been met adequately. They have a need for special materials in the collections, improved access to facilities and services, and special training and assistance in the use of the facilities and services.</td>
</tr>
<tr>
<td>Rural Populations</td>
<td>This group needs improved access to facilities and services, and may need some special materials. The needs of this group are probably not being met adequately at the present time.</td>
</tr>
</tbody>
</table>

*The terms better, special, high, and more, are all contrast terms, with the needs and services of the general composite population being the norm for comparison.*
<table>
<thead>
<tr>
<th>Name of Group</th>
<th>Special Information Needs of This Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Migrant Workers</td>
<td>The needs of this group are generally not served adequately. This group needs improved access to materials and services. Members of this group generally have a literacy problem, and are usually unaware that libraries or information centers can do something for them. They may need special materials, as well as training and assistance in the use of the facilities and services.</td>
</tr>
<tr>
<td>Illiterates</td>
<td>This group needs special materials, more training in the use of the facilities and tools, and perhaps some extra staff assistance to help make better use of the facilities. Present services are generally considered inadequate for this group.</td>
</tr>
<tr>
<td>Visually Handicapped</td>
<td>This group needs different forms of material (e.g. braille books, large-print books, recorded books and other material); will need assistance in getting to the facility; and will need training and assistance in the use of catalogs of the facility.</td>
</tr>
<tr>
<td>Deaf</td>
<td>This group may need some special staff assistance.</td>
</tr>
<tr>
<td>Mentally Retarded</td>
<td>This group may need some special materials and some assistance in the use of the facility.</td>
</tr>
<tr>
<td>Physically Handicapped</td>
<td>This group may be unable to hold or handle printed materials, and they may need different forms of material (e.g. talking books and journals); may need special physical facilities in the library (e.g. ramps); and may need assistance in getting to the facility and using the catalogs and other resources of the facility.</td>
</tr>
<tr>
<td>Limited Accessibility (institutionally-confined, shut-ins, geographically remote)</td>
<td>This group needs improved means of access to the facilities and services. Present services are probably inadequate for most people in this group.</td>
</tr>
<tr>
<td>Prison Inmates</td>
<td>Most prison libraries are generally regarded as inadequate. Besides the present problem of limited access to information materials and service, there is also a need for special materials and services such as legal reference materials and legal counseling. There is also a need for improved collections on many subjects for both recreation and education purposes.</td>
</tr>
</tbody>
</table>
C. REFERENCES


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Sargent, Nanette. Library Service to the American Indians in the Southwest. Paper presented to Dr. Roy Evans, University of Missouri, School of Library and Information Science, in partial fulfillment of the requirements for the degree Master of Arts in Library Science. Columbia, Missouri, July 1970. 34 p. (ERIC accession #ED-063 003)


A. INTRODUCTION

The general pattern of this chapter will be to list the public library user groups that are distinguishable in the literature and discuss their needs and the kinds of materials and services appropriate to the satisfaction of these needs. A number of things need to be said about this deceptively simple first sentence.

1. "Groups distinguishable": In restricting the discussion of public library groups to those distinguishable in the literature, other possible groupings in the general population may be missed. Precisely because they are unidentified, these groups may need specialized services more desperately than any other. No other such groups occurred to this writer, but the possibility that others exist should be kept in mind so newly emerging groups may be quickly recognized.

2. "Distinguishable in the literature": It was intended that the sources upon which most reliance would be placed were carefully done research studies on needs and desired services. A number of these were found, but some areas had none. Even where such studies were found, a second sort of source was also found useful, if not quite as reliable as broad-based sample studies, namely, intuitive descriptions based on the personal experience of one or several librarians working with the group in question. In addition, three factors, the breadth of coverage of this report, the limitation on time, and the fact that the intense interest in public library client groups is a fairly recent phenomenon, led to a concentration on materials published in the last five years or so. Older, valuable material may have been missed.

3. "Kinds of materials and services appropriate": There is a natural tendency to define needed materials and services in terms of the traditional library structure and philosophy. Yet there is abundant evidence that libraries are serving only a minority of many groups now, and that they are serving a particularly small portion of the many ethnic and racial minority groups in our society. There is reason to suspect that very great changes in the structure of library service will be necessary to involve and satisfy all these groups in our society. It will not be debated here as to whether it is possible to make radical changes in library service and still maintain the traditional model of the American public library."** It will be suggested only that the decision-makers of American public libraries should be at least receptive to perceptions, approaches, and techniques which represent a radical shift from traditional patterns. Openness to the suggestions in the following pages should be openness of the sort where the reader is

*University of Maryland. School of Library and Information Services.
**Among other things, that model depicts the library as a place for independent study and information gathering by citizens who pride themselves on their ability to find things on their own. In addition, the library in the model contains some kinds of information (e.g., scholarly or semi-scholarly data) but not others (e.g., where to get a legal abortion).
willing to consider shaking up the fundamental model or paradigm itself of library service.

Two major models of information service which represent alternatives to the traditional library pattern are the information/referral center and the hotline, or switchboard. Neither of these as it currently exists will probably be suitable as a model for a new library/information center of the future. But they do represent efforts to meet information needs not being met currently by libraries, and elements of them will probably be incorporated into the eventual new model implied by the changes suggested for public libraries. Kahn (32) describes the information/referral center, Forsman (20) the hotlines. Bloss (8) describes an existing library which has incorporated much of the Kahn model, and Roberts (52) addresses himself to the attitudinal prerequisites for these new approaches.

4. "Materials and Services": It is fairly self-evident that in order to provide a new service to users, a public library must make changes in its organization and structuring to a greater or lesser extent. Thus, in a report of this sort, it can be assumed to be important to discover all service-related needs of the users. If changes to meet these needs are implemented, they will have an indisputable impact on the library's functioning.

The value of discussing materials, on the other hand, is not so evident. It may be seen that shift in collection content for the most part does not involve institutional changes; it is simply a local matter of probing one's users' needs and buying to suit them. Thus, variation in materials content may appear to be a matter of lesser importance.

But the results of many studies contradict this view, and in fact, point to materials as the single most important factor in determining whether people will use the library. Bundy's (11) huge (21,000 responses) metropolitan public library study found that "Book selection proved to be the aspect of service which was of greatest concern to patrons" (p. 957). One in four respondents commented on it without specifically being asked to do so. Berelson (6a), the classic early summarizer of public library studies, says essentially the same thing (p. 83). Similarly, business users most commonly want improvement in library collections (Meyer 41, p. 73). Whatever services may be offered, people will not use the library unless there is content which interests them. As will be shown, people have strong and sometimes surprising interests. Older people do not like to read about religion, for example (Romani 54, Javelin 31). So even though materials choice does not involve as much in the way of institutional changes, it was felt to be at least as important to consider here as needed services.

The user groups are divided into five broad categories, and are simply described one after the other, with brief summaries at the end of the broad categories.
B. THE GENERAL USER

The "general user" is a rather amorphous and inappropriate category for a paper such as this, which is reviewing needs of specific identifiable groups in the population. The "general user" is mainly but not entirely white middle class. It would be unfair, however, to say general user needs are co-terminous with those of the white middle class, and this writer has not come across any papers on the library needs of the white middle class per se. For this reason no effort will be made to go in depth into studies couched in terms of general library use. Some few general comments will be made, however, in order to set what follows in context.

Incidentally, it would not be a joking matter to look into the needs of the white middle class. Though they appear to be better served than the remainder of the population, there is still only a minority of this group which uses the library. In particular, the mainly-white move to the suburbs has been one of the major sociological and demographic facts of recent years. One suspects there must be a number of typical types of needs in this group that grow out of similar aspirations and problems. Yet this writer has tried in vain to find discussion of the needs of the typical suburbanite.

Berelson's 1949 description of the typical general public library user is the following: Young, well-educated, female, white, middle-class, single (6a, pp. 49-50). (Women only slightly predominate over men.) Later studies (Bundy 11, Medelsohn and Wingerd 40) confirm that this pattern still remains today.

As one study noted (Access 30, p. 106), though services and resources had improved radically in recent years, they still (as of 1963) fall considerably below the American Library Association standards. As noted earlier, only a minority of all potential users actually use libraries (Berelson 6a, pp. 124, 125).

Libraries do serve many users and have a good image in the community (Berelson 6a, pp. 10, 85). But these less flattering statistics above are brought out to suggest that service could use improvement across the board. The evidence of a low use level also serves as stimulation to serious consideration of the radically new models mentioned earlier.
C. AGE GROUPS

1. Children and Young Adults

Children and young adults actually represent two quite different groups with problems and needs unique to each. They are combined here for the reason that this writer lacks both the time and expertise to deal with them properly. Both areas are whole fields themselves, and library students interested in serving these groups devote several courses to understanding them.

For the purposes of this report, two sources of service to children (Arbuthnot 4a, Huck 29a) and two on service to young adults (Carlson 12, Pilgrim 48) will be recommended, and just a few general comments made about the area. Between about 40 to 55 percent of public library circulation is in juvenile titles (Berelson 6a, p. 53; Access 30, p. 70). Like it or not, these categories represent an enormous portion of the library's clientele. As noted in the student section, there is a tendency among librarians to restrict the younger age groups, and even, in some cases, to look down upon service to them. Since young people are future adult users, it might be well to consider the consequences for adult library use of unpleasant library experience in childhood.

2. Older People

As people in convalescent homes are almost exclusively in older age brackets, while shut-ins may be of any age, the former class of users is discussed here, while the latter class is discussed in the section on the physically handicapped and shut-ins. Depending on the situation, there are a variety of ways of serving the older institutionalized:

Very small nursing homes may be serviced by a librarian who visits four or five such institutions in an afternoon, bringing books ordered on a previous visit and taking back ones already read.

A book cart may be kept at an institution, and stocked periodically by a public librarian who comes to the institution and wheels it around from room to room.

Where patients are ambulatory, it may be possible to stock a whole room with books (which are then changed occasionally)—(Romani 54, p. 288).

An interesting related suggestion has to do with the older person who lives at home and can get out, but who is, for reasons of infirmity or slight handicap, afraid or unable to go more than a couple of blocks from home. In such a case, drop-in centers can be utilized—small collections at recreation centers which are changed occasionally and do not have a library staff person in attendance.

For those older people who can get out, Reed (50) makes the following points about service to older people:

They like early afternoon programs.

They have a desperate need for transportation.
Personal contact is vital in stimulation to continued use (p. 37).

In addition, as physical handicaps are so common, the following sorts of things are valuable in service to this group: Large-print books, shut-in or delivery service, and design of library buildings for ease of physical access (Javelin 31, p. 134).

Two other intriguing suggestions in the area of services were encountered.

1. Libraries might get more involved in pre-retirement counseling. Some companies do this, but many people, such as housewives and the self-employed, would have no opportunity for this other than at a library (Javelin 31, p. 136).

2. The library might involve older people in local history projects. These people have the time to delve into it, and often the interest, as age seems to give people more of a sense of history. They can participate directly as well as by recording their own experiences in writing or on tape. They would perform a useful service to the community and probably get considerable enjoyment out of it too (Javelin 31, p. 137).

With regard to types of materials preferred by older people, two sources corroborate each other nicely (Romani 54, Javelin 31). "Annotated lists of books that are current or in popular subject fields, like the Negro, Family Life Stories, Best Sellers of the Past, etc., are very well received, but we have never found a particularly enthusiastic response... to book lists about aging—a subject with which they are perhaps already too well acquainted. Nostalgia, yes—aging, no. And, oddly, religion, no" (Romani 54, p. 288).

A survey among older people made in 1967 showed "that mysteries, light romantic novels, and biography headed the list, followed by recent fiction, nature and animal stories, and travel adventures. Westerns, art, and music were of less interest. What seemed surprising was the fact that humor and religion were at the end of the interest list—as were poetry, the classics, current events, and politics. Nor were the senior citizens in Boston particularly interested in reading in the field of science fiction, sports, science, or psychology" (Javelin 31, p. 133).

3. Summary

For reasons given in the text, the child and young adult groups were discussed only very briefly, primarily in terms of the importance—indeed, the predominance—of these groups among the library user population. As this left only older people in the discussion, no generalizations could be made across age groups, but the older patrons, because of frequent handicaps and limitations on mobility, somewhat resemble the handicapped.
D. VOCATIONAL AND RELATED GROUPS

1. Labor

Oko and Downey's book on *Library Service to Labor* (47) appears to be a primary source, describing all aspects of service to this subgroup of the population. The fact that labor unions are formally organized representatives of this public library user group lends some important advantages to the librarian trying to serve working people. Labor unions have union halls, newsletters, and officers, all of which can be of use to the librarian trying to reach this group.

"Deposits" of 25-50 books can be placed in a union hall and changed every five or six weeks. Members can charge out these conveniently-placed books from a union officer who is in charge of them. Librarians usually select the first such collection sent to the union hall, but later they may get requests for everything from best sellers to technical books on the trade in which the union works (pp. 26-27). In addition, union halls are useful locations for displays and exhibits of interest to the members, as well as for direct advertisements for the library (p. 265). Union conventions are also a means for reaching labor.

Union bulletins or newsletters are yet another medium for reaching members. The Boston Public Library sent four-hundred-word articles on topics such as "Biographies of Trade-Union Leaders" to the editors of such bulletins and found them widely used (p. 27). Union officials represent a very valuable source for information on the needs of union members and for background on the unions. Finally, in some cases the union secretary may be willing to distribute to all members library-prepared bibliographies of technical books in the union's field of expertise (p. 27).

Additional points of interest with regard to services for labor are the following:

Labor materials may be combined with business materials in a subject reference division, provided it is made clear that labor problems will be given equal consideration (p. 127).

Where there is a large labor collection, special subject headings should be added to the catalog to make the materials more accessible. Similarly, indexing for pamphlet materials (usually in "vertical files") should use terms the labor people will know. The simpler the arrangement is, the better (p. 184).

Finally, the following are suggested types of content for materials of interest to labor:

History, structure, and policies of labor organizations.

Specific industries, unions, and occupations, including information on wages, prices, job classification, financial statements.

Industrial relations, collective bargaining, grievance handling, etc.
Social and economic security, including information on pensions and health care.

Government and labor, including material on legislation affecting labor.

Human relations.

Biography and fiction (pp. 127-8, 183).

2. Experts

Highly educated people 1) use the public library a great deal, and 2) have a strong need for advanced research materials. As evidence for the first point, the New York public library study found that "the greatest intensity of library use was shown to be among college graduates, with 15 to 30 percent of the total graduates visiting some libraries within one week" (ELS 19, p. 132). In a sample of University of Michigan faculty across subject fields, 24 percent of the faculty members had public library cards, while 61 percent of their wives had them (Marchant 37, p. 446). The statistics for cards held by the population as a whole vary, but they are more in the area of 10 percent (p. 447). (See also 6a, p. 1.0 for higher figures for the general population.)

Evidence of the need for the more advanced sort of materials in public libraries comes from two sources. A Nelson Associates study of Michigan library needs found a striking need of this sort: Nearly half of the professors teaching off-campus courses of all kinds (from university extension to locally-organized non-credit courses) said they had to change and curtail their assignments to students because of the limited resources of the local public libraries (Nelson 43, p. 51). As the democratization of education continues (see also section on continuing education), such needs are only likely to increase.

Similarly, a Nelson study of the New York Public Library research libraries showed a high level of use by people of advanced education. Two-thirds of the users had a bachelor's degree or above (Nelson 44, p. 1-23). There was strong professional use. for research, academic work, or job. Only one-fourth of the users were there for "casual" purposes. Over two-fifths made visits of more than two hours. Nor was the library serving as another college library for students—only one-third of the patrons were students, compared to the usual half or more of public library patrons (see section on students)—(pp. 1-23, 1-24). An even higher general level of education was found among the users of the photographic services and the users of the special collections and special study areas (p. 1-25). Hence, there is evidence of the need for advanced research materials in the public library system. (See also discussion of teachers' needs under "Other Vocational Users.")

3. Users from Business and Industry

There are three excellent research studies available on business needs from public libraries. North et. al.'s listing of the problems business and industry cause public libraries when they make their demands, reads like a
list in reverse of the sorts of services business would like from public libraries. Referring to the businessman, they say the following:

1. His reference is incomplete or erroneous, requiring staff time to verify.
2. He is unable to travel to the library, again requiring more staff time than a user who locates his own material.
3. If the library does not lend journals, he urges that this rule be changed or broken.
4. He wants photocopies made for him to keep, even at some trouble and expense and with doubtful copyright status.
5. He cannot wait for mail service, and wants delivery or to send a messenger to pick up, violating the principle of individual charge-out responsibility, as well as the accepted interlibrary loan code.
6. If the outside library does not have the item either, he would like it to take responsibility for obtaining the item" (North 45, p. 80).

In addition, most libraries do not catalog and arrange their materials in the ways needed by business (i.e., in the ways done by business libraries), and do not order the technical reports so needed by businessmen. Furthermore, "most libraries still have no way to locate items on loan which are desperately needed momentarily" (p. 81).

Bonn provides a very extensive and detailed description of the kinds of materials desired by business, even down to specific items (9, p. 1ff). It is not practical to go into detail here, but Meyer's and Rostvold's study provides similar information at a suitable, somewhat more general level. Their study of Southern California businesses is particularly helpful, as the needs are broken down by type and size of firm. Their table is reproduced in full on the following page (Meyer and Rostvold 41, p. 63).

Their proposals with regard to needed services are similar to those discussed in the North study above, with one intriguing addition: They pass on the suggestion of their business sample that libraries assist firms in ordering materials. Libraries would not do the actual ordering, but they would provide their knowledge of the bibliographic world to the less expert firms (p. 74).

In addition, Meyer and Rostvold evaluated two other areas of frequent business/public-library conflict: It is often said that businesses want information and materials instantly. The study found the businesses were a little more reasonable than that, and would be content with one-day service in most cases, sometimes even two-day service (pp. 61, 74). Secondly, they investigated the matter of journal retention. Across their sample, 60 percent of the businesses would be satisfied with back runs of five years or less. There were significant variations from one business type to another, however,
<table>
<thead>
<tr>
<th>Location</th>
<th>Type of Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pasadena</td>
<td>Pomona</td>
</tr>
<tr>
<td>1. Economic statistics</td>
<td>50</td>
</tr>
<tr>
<td>2. Directories</td>
<td>47</td>
</tr>
<tr>
<td>3. Books on management</td>
<td>40</td>
</tr>
<tr>
<td>4. Books on science and technology</td>
<td>43</td>
</tr>
<tr>
<td>5. Journals on management</td>
<td>37</td>
</tr>
<tr>
<td>6. Trade journals</td>
<td>33</td>
</tr>
<tr>
<td>7. Journals on science and technology</td>
<td>41</td>
</tr>
<tr>
<td>8. Legal and tax looseleaf services</td>
<td>34</td>
</tr>
<tr>
<td>9. Handbooks and tables</td>
<td>31</td>
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<tr>
<td>10. Government documents</td>
<td>30</td>
</tr>
<tr>
<td>11. Abstracting and indexing tools</td>
<td>29</td>
</tr>
<tr>
<td>12. Standards</td>
<td>21</td>
</tr>
<tr>
<td>13. Specifications</td>
<td>21</td>
</tr>
<tr>
<td>14. Trade catalogs</td>
<td>19</td>
</tr>
<tr>
<td>15. Records and films</td>
<td>16</td>
</tr>
<tr>
<td>16. Patents</td>
<td>14</td>
</tr>
<tr>
<td>17. Other (reports, microforms, maps, etc.)</td>
<td>16</td>
</tr>
</tbody>
</table>

Source: Meyer, Robert S. and Gerhard N. Rostvold (ref. 41)
with 100 percent of the trades so satisfied, while only 55 percent of the service businesses felt that way (pp. 67, 75). Perhaps the retention policy on specific journals could be adjusted to suit the desires of particular business user groups or to suit the predominant type of business in the library's area.

4. Students

There is a paradox connected with student library use. They constitute the majority of public library users (ELS 19, p. 132). They are thus far and away the most significant public library user group. Yet at the same time they are the group which registers the most dissatisfaction with public library service. We might expect that because of the large number of student users, libraries would have adjusted service to suit them best of all. On the contrary, librarians more often complain about "excessive" student use and impose restrictions on their use.

Let us examine the factors involved--first, the statistics on use, secondly, the level of student satisfaction, and finally, reasons for librarians' reactions. The figure above, that students constitute the majority of public library users, comes from a New York state study done during 1963-66. The same statistic may be seen from the other side, so to speak, in the results of the "Philadelphia Project" (Benford 6), in which 10,000 students from the second through the twelfth grades were questioned about their library use in that city. About 60% of all students had visited a public library at least once a month during the survey period (p. 2041). As it is based on self-reporting, this statistic is probably a bit high; even so it is quite impressive. It means the public library has a magnificent opportunity, extending over years, to reach and influence students, and to recruit them as lifetime users.

Another pair of statistics from the survey are not encouraging in this regard, however. Seventy-five percent of the students in the fourth and sixth grades said they enjoyed reading for recreation; only 62% of the twelfth graders claimed this (Benford 6, p. 2044). There are no doubt many causes for such a statistic; the library is far from the only influence on a student's attitude toward reading. But it might be hoped that the library could exert a strong positive influence--and in fact, it may be doing so now--but if so, it is clearly still losing the battle.

Student dissatisfaction shows up in several studies. Edwards says many librarians do not like students and that students respond in kind (18, p. 71). Wilder's Indiana survey of library users (61) found that 79% of users over the age of twenty were "very satisfied" with library service, while only 58% of those under twenty made that response (p. 11). In the Philadelphia study only half the students were satisfied with everything about the library. An even more striking statistic turned up as well: While about half the students find all the material they need in the public library, 20% cannot find anything they need (p. 2044). The latter statistic may be due to lack of school/library cooperation. If a teacher does not inform a library what he or she is assigning, then the first few students in the class who go to the library check out all the relevant materials and the rest of the class cannot get what it needs.
What is responsible for this relatively high level of dissatisfaction? One reason has already been referred to, lack of school/library cooperation. This is the surface symptom of a deeper problem. The fundamental relationship between the school and the public library has long been ambiguous (though some efforts are being made to resolve this ambiguity through, for example, the Hawaii experiment in combining public and school library services in a single facility). Many school libraries are built and staffed—and then closed after school and in the evenings. This leaves the public library as the major source of study and project materials for students during those hours when they do most of their homework. Yet at the same time public libraries are not seen primarily as being intended to serve students—on the contrary—and staffing, charging systems, service levels, etc., are not geared to student needs.

As Schiller very perceptively points out, the classic American paradigm of the public library's purpose and function in society holds that self-improvement is the noblest reason for using the library. Reading for emotional experience and reading in connection with formal education tend to be considered secondary in service (56, p. 56). This probably stems from the nineteenth century American culture; self-education requires more determination and self-discipline, while merely submitting to formal education and its deadlines and pressures to work is easier, hence not as admirable. Thus, one finds the strange situation of the library directing more attention to helping the man who wants to teach himself woodworking, than to the high school student studying physics.

Perhaps status enters the picture as well. Librarians consider the "grown-ups" the primary clientele to be served. Schiller (56) and Edwards (18) discuss this pattern in a general way. The particular irony in this behavior on the part of librarians is that these "mere students" are potentially the future adult users. Berelson quotes two studies in which the proportion of public library users in the over-twenty population is only one-fifth the proportion of 16-20 year-olds who use the library. In other words, beyond school-leaving age, the proportion of the general population who use libraries subsides to one-fifth of what it is at the earlier age (p. 22). This precipitous fall in library use after leaving school may have many causes, but users' treatment while students certainly cannot be seen as an inspiration to stay on as users in adulthood.

One more statistic along this line remains to be quoted: A 1963 sample survey found that 20% of the public libraries in the country impose restrictions of one sort or another on students. The most common restrictions were on number of books which could be taken out, the next most common on use of periodicals and reference materials (Access 30, pp. 69-78). These restrictions on student use violate the spirit of the ALA Library Bill of Rights, which states that a person's rights to use a library should not be denied or abridged because of his age (see also Chapter IV of this report).

Thus, in sum, it appears that the public library tends to restrict and lock down upon the high level of student use, rather than trying to accommodate itself to its largest user group. If we need any more evidence of this, we can find it in the paucity of thorough studies on student needs in the positive sense. This writer is able to describe student needs only in terms of the negative of their complaints.
From the complaints made in the Philadelphia study one can see some of the student needs (the complaints refer to both public and school libraries): inability to find the books needed, too many rules and regulations, failure to get help from the library staff, fear of walking through bad neighborhoods to get to the library at night, crowded conditions in the library (6, p. 204). Audio-visual materials were in greater demand by students from lower socio-economic levels, perhaps because the use of such materials is emphasized in schools in Philadelphia serving these populations. Since all students found it easier to get print than non-print materials in the libraries, one can suspect either funding problems or a failure on the part of the libraries to deal with these new materials as well as they do with the older forms. Whatever the cause, the result is a lower level of service to a part of the population libraries want very much to reach. Students from the lower economic levels also said they found it harder to visit public libraries than did students from higher levels (p. 204). Incidentally, a San Antonio experiment found a book-by-mail system beneficial to young people without access to automobiles (55).

From all this, it appears that improvement in service to students is one area in which a tremendous impact on library use may be expected. Students constitute simultaneously the majority of library users and the chief pool of future adult users.

5. Continuing Education and "Open University" Student

Most of the things suggested in O'Brien's survey article (46) on continuing education will appear elsewhere in this report as proposed techniques for reaching various groups--activities such as film showings, lectures, discussion groups, and so on.

One of the new ideas in adult education is that of the "open university". If this becomes a popular approach to education, it is bound to have a significant impact on public libraries. A British version has been described as follows: "...it will include early morning television and radio programs, correspondence courses, local tutorial groups, and regional centers for brief resident sessions" (Ashby 5, p. 21). A new, similar setup in Wisconsin includes study at home with resources provided there or in local libraries. There are to be local "Study Centers"--most of which will be in public libraries (Monroe 42).

Even where study centers are not instituted in local libraries, the impact on the public library is likely to be significant if open university study becomes popular. Adults will start demanding college level study materials from their public libraries--and they are not likely to be as patient with the second-class status ascribed to students (see previous section) as their children are. Let us hope, however, that public libraries will not wait to be prodded, and will instead seek to evaluate and accommodate this new demand before it becomes pressing. An effort might be included in this to gain appropriate compensation from the universities making the new demand so that all users may be well served.

Ashby suggests the sort of demands that will probably be imposed on public libraries with the growth of the open university idea:
There will be increased demand on library resources in all respects—seating space, reference use, circulation, etc.

College-type demand on books will be experienced. Some materials will be in very high demand, but it may be necessary to resort to a three-hour reserve system or to multiple copies.

Students wishing to meet with tutors in the library will need places where they can talk.

Increased requirements will be felt for the library to serve a study-hall function—more seating, open later hours (Ashby 5).

6. Other Vocational Users

A Michigan survey of research library needs produced information about two additional groups, government officials and teachers (Nelson 43). The one notable point made about the former group was that the government officials stressed the need for speed of access to current materials (p. 52).

Teachers were found to rely first on public libraries to meet their own professional library needs. They used them both for information related to teaching and curriculum, as well as for their own work on advanced degrees. One might expect the school library to serve at least the first need, but it evidently does not. The teachers said that the quality of reference service was very important to them in choosing which library to use (p. 52).

The implications of these results are very important. The public library (at least in one state) is not only a self-education resource but is also the chief source for the satisfaction of teaching and curricular library needs in the formal (lower-level) education system. The public library is thus a fundamental resource for all the community's educational information needs.

7. Summary

There are two outstanding themes in this section, first, the significant dissatisfaction of that majority of public library users who are students, and secondly, the need, described in four of the sections, for more advanced research materials in public libraries.

Many libraries are restricting and discouraging student library use, rather than catering to it. In the process they are discouraging future adult use by those students and hence almost certainly aggravating the already striking imbalance in number between adult and student users.

The open university student, the "expert", the businessman, and the school teacher all need more advanced research materials in their local public library. There is a clear need in the community for serious, work-related information to be provided by the public library (at least according to the studies reviewed here). The provision of that sort of information will not only meet a community need, but will also improve the public library's chances for a good level of funding support in these days of civic starvation.
E. MINORITIES AND SOCIO-ECONOMIC CATEGORIES

There are many minorities in our society. This section will consider only some of them. No doubt those not mentioned, such as Oriental-Americans, and the many linguistic and nationality groups, e.g., Irish, Ukrainians, Greeks, have some needs unique to them, and representing their special history. Nonetheless, it is probably safe to say that changes suggested for groups similar to them will be quite valuable for them as well.

1. Foreign Language Speaking (or Reading) People

The only significant work found that was concerned with this group was the study done by International Research Associates, entitled Access to Public Libraries (30). The results of a nation-wide survey of public libraries showed that for libraries serving populations of 100,000 or fewer, the modal number of books owned that were printed in foreign languages was fifty or fewer. Thirty-six percent of the libraries serving populations of more than 100,000 had one thousand or fewer foreign language books (p. 84). In sum, such materials represent a very small part of the typical public library's resources.

In addition, the study provided some evidence that such foreign language collections as existed were more oriented to the native English speaker learning a foreign language than to the person for whom the foreign language is native. Communities were arrayed according to the foreign language most read in them, and this data compared with information on the most popular foreign language (as represented by number of books) in the library in each community. It would be expected that the language most popular in the community would usually be the same as the most popular language in the collection. This would be a natural result of the library buying books to suit the needs of the community. This pattern did indeed appear—but with an interesting wrinkle. Noticeably more libraries reported their most popular language as being the same as the most popular in the community where the language was one of the three commonly taught in school (French, Spanish, German) than was the case when the language was not taught in school (Italian, Scandinavian languages)—(p. 84).

In other words, there is some evidence that books are bought to suit student needs rather than to suit that part of the population which may be expected to prefer to read outside the English language. (There may be other reasons for this difference, but this at least, is a plausible explanation.) Since those who prefer to read outside English can be expected frequently not to be fluent in English, the scope of possible reading sources for them can be expected to be narrower than is the case for the native English speaker learning a foreign language. It therefore seems particularly unfortunate that this latter group is not the primary focus of foreign language collections.

In our society pluralism is coming to be emphasized rather than downplayed. Groups are taking pride in their origins rather than rejecting them. In such an atmosphere, it may be particularly wise to cater to foreign language needs.
2. American Indians

Smith (58) writes very strongly about the policy of the federal government toward Indians. Drawing on a report of the U.S. Senate Subcommittee on Indian Education, she says that the policy has been one of "coercive assimilation", leading to "the destruction and disorganization of Indians as communities and individuals", damage to Indian education, and massive prejudice and discrimination intolerant in the extreme of the Indian's culture and heritage (p. 223).

The need here for literature to help in restoring pride and self-respect is therefore as great as, if not greater than, that of other minorities. This must come primarily in the way of materials by and about Indians. This statement on the need for materials is not based on a large survey, but Smith reports that in one local informal survey of reading patterns it was found that at first Indian users were interested in the history of American Indians, especially those of their own areas, Indian crafts, Indian folklore, and affirmative materials on Indian culture in general. Later on, after this initial interest had passed, a reading pattern emerged that was quite typical of people in general (p. 230). This reported two-stage pattern raises an interesting possibility—that after an initial intense involvement, interest by any minority group and its origins may subside and the group's reading pattern merge with that of the population as a whole.

Smith mentions two other areas of need related to library resources that may be surprising to some readers: 1) Indians want materials in Indian languages. Not only do literacy levels vary, but familiarity with English does too. In New Mexico it is often the case that the Indian language is the native one, Spanish the second language, and English the third; 2) There is a need to preserve the oral literature of myths, legends, and poetry of the Indians, as well as their music, songs, and dances (p. 227). Public libraries have traditionally been quite proud of their role in preserving local history. This should include local Indian history as well.

3. Blacks

According to Access to Public Libraries (30), blacks receive poorer library service than do whites. In a study of major cities around the country it was found that "neighborhoods which are predominantly white have a far greater probability of containing a branch library than those which are highly non-white. Furthermore, those branches which do exist in predominantly non-white areas are generally among the least adequate units of a city's library system (p. 57). By holding class/income levels constant it was found that the difference still held true—so the discrimination was almost certainly racial, rather than class-related, in origin (p. 68). So the first order of business with blacks appears to be simply to give them service at least equal to that received by whites.

No detailed statement was found on types of subject content of interest to blacks. The interests expressed in the section on the functionally illiterate however, may typify interests of disadvantaged blacks.

Another aspect of black needs has come to light recently with the publication of Dillard's book (15a) on American black language. Part of the
ethnocentric assumptions made by whites in recent years in the talk of "cultural deprivation" had to do with language. Many people still feel the street vernacular of blacks is a defective language, somehow a simpler, bastardized version of "real" English. Dillard and others, e.g., Labov (33), have shown that it is a complete, rich language of its own, its grammar in some instances enabling the expression of subtler shades of meaning than is possible with white English (without elaborate circumlocutions). In addition, what looks to white English speakers like simple grammatical errors, e.g., "she run" instead of "she ran", is a holdover effect from the grammar of African languages the blacks originally brought with them.*

All this is gone into here to suggest that libraries might profitably make materials available in the black language just as they make Spanish materials available for Mexican-Americans. Such reading materials as become available under the impact of Dillard's book could be bought, but since the language is primarily an unwritten one, particular attention could be given to providing non-print materials in black English.

Franklin's thesis (21) provides data on the pattern of library use by black ghetto dwellers. The most striking thing about his results is that they confirm the same classic pattern Berelson found for his study of primarily white use: Use of the public library is greatest by young, female, single, better-educated and economically better-off blacks.

4. Mexican-Americans

This section will concentrate on two sources, one, a survey by Robert Haro, a Mexican-American, of library needs and use patterns by Mexican-Americans in California (27), and the other a description by Barbara Wynn of an active program in Oakland, California designed to reach the same group (63).

Haro's results on levels of satisfaction with libraries are depressing if one wants to believe that libraries are reaching this group. Here are his summary results:

<table>
<thead>
<tr>
<th>Dissatisfied with Library Service</th>
<th>17%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfied with Library Service</td>
<td>6%</td>
</tr>
<tr>
<td>Did not care, or had no opinion</td>
<td>77% (p. 737)</td>
</tr>
</tbody>
</table>

As for use, though many Mexican-American children (41 percent) said they used the library, the loss of Mexican-American interest really appears in the teen years. Note the following contrast: Only 14 percent of those in the 16-25 age bracket said they used a public library branch (and even fewer used a main library)--(p. 737), while one study Berelson reported found that fully 37 percent of the 14-29 group in the general population used the library (6a, p. 23).

Dillard's book was unavailable to this writer. The discussion is being drawn from two reviews of it (Time, 7 August 1972, and Newsweek, 14 August 1972). The example in the text is drawn from the Time review.
Haro found that the young Mexican-Americans wanted the library to carry more activist literature on their own political movements, Brown power, and on "what makes Chicanos tick" (p. 738). The older respondents mainly wanted more Spanish language materials and more library employees who could speak Spanish. As fewer than three-fifths of those interviewed "had a sufficient command of the English language to be able to utilize English-language library materials" (p. 738), this should not be surprising.

The Mexican-American culture, according to Haro, is such as to make the woman more a homebody and less likely to know English, so it is particularly important that "women's" materials be available in Spanish. As there is relatively little Spanish material on the public media available to the woman at home, the library has a particular opportunity with Mexican-American women not only to provide the home-and-family type of materials they may come for, but also to widen their horizons into areas that would not have been available to them otherwise. The condition of being a poor English speaker and having relatively little exposure to the outside world is likely to hold true for women in some other minority groups as well.

The project described by Wynn (63) contains many valuable points in serving Mexican-Americans. She confirms the importance of having a bilingual staff. In addition, she brings out a point that should be kept in mind in serving any minority group: involve members of the community in an advisory capacity. If this is not done, library activities are liable to become just one more form of Anglo paternalism. The project reflects strong public relations and outreach aspects. Advertisements are placed in media ranging from a library newsletter to bumper stickers. Collections of paperback books and magazines are maintained in various agencies serving the Spanish-speaking throughout the city of Oakland. There are Spanish and English classes, story-hours, Spanish film, all often outside the library. In addition, many information referral center functions are performed.

Specific kinds of materials found useful are the following:

- "Living English" records. These are so popular that the library has to stock fifty or more copies at a time.
- Easy-to-read materials in both English and Spanish.
- Practical materials: cooking, repair, etc.
- Recreational reading with a Spanish accent, so to speak.
- Histories of Mexico and biographies of great Mexican leaders.
- All kinds of Chicano and La Raza materials (63, p. 753).

5. Women

It may seem strange to include women here after this string of minority groups, since women constitute the majority of library users and hence cannot be seen as a neglected group in terms of traditional library service. Yet it can be argued, as feminist leaders have done, that women are a true minority in the sociological, if not the numerical sense. As this sentiment spreads among women, there will be an increasing demand for the kinds of materials typical of the interests of newly self-conscious minority groups—materials that increase pride and self-respect, that tell heretofore neglected history, and that are polemics on the movement for equality.
The literature speaking of women in minority terms has already started to appear (Donlan 16, Friedan 22, Greer 23/4, Trecker 60), and the instant popularity of the journal Ms. (see second issue for discussion and statistics) indicates an already very strong interest among women for a new literature. Public libraries should prepare themselves for this demand. For there is one important difference between the female "minority" and the other minorities that have preceded them: There are four times as many women as there are members of the next largest minority, blacks. When the demand for the new women's literature reaches its peak, it will be enormous indeed.

6. Rural Users

Access is the critical factor for the rural library user. According to Smith (57, abstract), "Ninety percent of the twenty-seven million Americans who did not have access to local public libraries in 1956 were from rural areas..." Another source reports that there was significant improvement in the provision of library service between 1955 and 1962: The percentage of Americans who were without library service went down from 17 percent to 10 percent, with most of the improvement being in the rural areas (Access 30, p. 113-114).

So the first order of business in serving rural areas is simply getting the people together with the materials. A number of ways of meeting this need have been devised—bookmobiles, circulating local branches (i.e., branches so small that their entire contents are changed frequently), and mailed requests are some of them (Smith, 57).

McNeal surveyed over 800 rural citizens of Tennessee (39). Only 19 percent of them reported any book reading. Farmers were poorly represented among those making requests of the regional library; McNeal suggests that they may satisfy their information needs through agricultural extension services (p. 39).

McNeal provides a summary of the kinds of non-fiction topics in which the people wanted more reading material. Before listing these, however, it should be noted that over 80 percent of the regional library's circulation was in fiction, so the range of non-fiction materials needed represents a definite minority of overall needs (p. 90). This high proportion of fiction fits a pattern long since confirmed: The smaller the town a library is in, the higher the proportion of fiction circulation, with the total range in past studies going from about 50 percent fiction in urban areas to as much as 90 percent in the smallest towns (Berelson 6a, p. 56).

In interviews, respondents in the McNeal Study reported that they would like more reading material in the following areas: vocational or related, problems of the home, personal matters such as health and hobbies, current problems, and finally, general things such as social problems, literature, and science. In the way of specific topics they said they would like more material on the following (in order of descending frequency): home management, farm management, child care and training, gardening, sewing and dressmaking, poultry, food processing, and home furnishing (p. 88).

Bonser and Wentworth surveyed Indiana farmers on their library use (10). They found that three-fourths of the farmers said they never used the library
for farm information. The farmers claimed that their low use was due to problems of distance than to lack of proper materials (p. 112). So once again, the basic fact (mentioned in the introduction) appears: Materials are the primary determiner of whether people use libraries. Bonser and Wentworth did find that farmers largely depended on the public library for the few books they read for general reading, the children getting most of their books from the library, the wives half, and the husbands one-third (p. 112).

Any broad-based consideration of rural needs would have to take government agricultural extension into account, as it already has an excellent county agent system which may serve certain kinds of needs better than the library can. Aside from this, fiction and practical non-fiction materials are desired by the rural citizen.

7. **Economically and Socially Disadvantaged**

A survey article by Robinson et al. (53) provides an outstanding summary of suggested changes in library services and materials that should be made to serve better the disadvantaged. Their summary will be quoted at length. Other studies in the area, such as Winsor and Burrows (62) and Clift (14) will not be discussed, because the Robinson summary says at one time what they say piecemeal. Another important source here is the ALA program statement on service to the disadvantaged (1). It too, says much the same thing as the Robinson article, but not in as much detail.

The suggestions in the Robinson article should be considered for other groups as well. Though they are intended to help improve service to the disadvantaged, many of them will be seen to be relevant to people in general, not to just one group.

One other thing should be kept in mind while reading the suggestions below. Peter Hiatt did a thesis study in which he interviewed in depth people who had been affected by active library outreach programs. A primary factor, which appeared again and again, regardless of the particular sort of library program, was the friendliness and openness of the librarian involved (Hiatt 28, p. 89). This, as much as anything else, would determine whether a person was drawn to the program. So it would appear that no matter what things libraries do, there must be librarians involved with an active interest and the right attitudes, or the efforts will be largely wasted.

The sections below from Robinson et al. come from pages 318-322:

**Accessibility.** (1) Subsidiary library collections, in addition to a multitude of bookmobile routes, should be housed and staffed in store fronts, post offices, hospital waiting rooms, employment offices, bowling alleys, and laundromats. (2) Such collections need to be located within the neighborhood where the disadvantaged learner or reader resides. (3) Free bus service, covering a wide variety of routes, ought to be available to transport library users, and prospective library users, to the branch or central library several times a week.
Staffing. (1) Librarians, of course, should be representative of a diversity of backgrounds. But, particularly in centers servicing minority groups, every effort must be made to hire members of those minority groups in order to promote identification and security. (2) In areas servicing a population where another language is spoken, one or more professional staff members should be able to speak and write that language well enough to communicate with library users. (3) Parents and students of the minority group ought to be trained and employed to serve a variety of paraprofessional functions. (4) When a substantive percentage of the population to be served is completely illiterate, at low levels of literacy, or partially literate...a staff member trained in the field of reading needs to be hired with the sole responsibility of working with individuals, small groups, and (perhaps from time to time) reading improvement classes. (5) All staff members servicing the library user, particularly reference and circulation, must make every effort to help actively and warmly. Some potential users are "turned off," never to return, by unanimated efficiency in a cold climate.

Relevance. (1) There should be an entry room, or orientation section, to be used as the first stage of acquaintance with the library. This room should be attractive and comfortable, housing eye-catching displays immediately relevant to the needs of the disadvantaged. A simplified collection of materials organized through the use of simplified labels, not the Dewey Decimal or Library of Congress system, should be ready for use. (2) A wide variety of current periodicals, such as Ebony, dealing with the life of the people in the community ought to be prominently displayed and available. (3) Recognition of important events and of the contributions by minority leaders should be presented via showcase exhibits, films, and recordings. (4) Paperbacks ought to be displayed prominently, preferably on revolving racks. A large quantity of them, on a variety of pertinent topics, should be accessible. (5) Displays concerned with one pertinent interest area or need should be featured and changed frequently. Books and other materials related to the area need to vary in size, appeal, and reading level.

Community service. (1) School and public libraries should feature storytelling times (scheduled frequently), and often offered in connection with parent workshops on storytelling and reading. (2) Libraries must take the initiative for improving adult reading by working in
conjunction with other agencies or sponsoring their own mini-courses and workshops. Such programs must steer clear of broad reading improvement courses, but instead zero in on special short-term courses related to the realistic reading tasks needed in homemaking, job application, specific occupations, consumer education, child care, and the like. (3) Booths of print and non-print materials sponsored by the library ought to be exhibited (with advisory service) at major community functions. (4) Community agencies should be able to find space at the library for forums on a multitude of topics which could intertwine with the services of librarians. In addition such visits to the library get prospective library users to feel comfortable and welcome. (5) Dramatic lectures and discussions on relevant topics by community leaders and inspirational guests should be sponsored by and held in the library. In fact, the library ought to be the center of cultural enrichment for the disadvantaged. Art displays, recitals, concerts, plays, films, and dance recitals should be presented. (6) Librarians in public and school libraries need to coordinate efforts to help teachers learn the skills of storytelling and to increase their knowledge of children's and adolescent literature. (7) Public libraries should provide collections of books on loan to the public schools when desirable. Such collections might also be made available to summer camps for disadvantaged children.

Recruitment. (1) Modern methods of mass advertising (television, radio, newspapers, posters in local store windows) should be utilized to acquaint the disadvantaged with the services of the libraries. (2) Librarians need to go into the community to seek registrants. Booths might be set up in supermarkets; a welcome wagon might greet newcomers; registration opportunities should be available and publicized in the schools. (3) Prospective library users ought to be invited to orientation meetings—very explicit and simple—which include the serving of coffee and refreshments provided by a Friends of the Library or other such group.

Specific procedures. (1) Reminders about the due date for books should be sent out before the books are overdue. (2) Book fines should be abolished. (3) Certain days need to be set aside and publicized when books may be returned to the library without penalty. (4) Books and other materials should be readily available to the new registrant without a waiting period. (5) A reading level for each book in the library ought to appear on title, subject, and author cards.
Preparation for library work. (1) Both in library school and inservice situations librarians need training in understanding the needs, aspirations, and life patterns of disadvantaged learners. (2) Every prospective librarian should receive training in human relations along with courses in sociology, anthropology, psychology, learning theory, and adult education. (3) Students enrolled in library schools very much need to serve frequent apprentice periods in libraries servicing the disadvantaged.

8. Summary

The reader is referred to Robinson et al.'s excellent summary of needed library activities in relation to the disadvantaged (see "Disadvantaged" section) as a summary suitable not only to the service of the disadvantaged but also to minority groups and even to the broader community. Many of the suggestions would be useful for people anywhere, not just people with the special set of problems identified with the "disadvantaged" or "minority" designations. In addition, the importance of materials about one's own culture and history cannot be overemphasized for the minority groups. Though this pattern can be seen across groups, there are needs unique to specific groups that should be acknowledged as well.
F. THE HANDICAPPED AND INSTITUTIONALIZED

In 1966 the Librarian of Congress testified that there were approximately two million Americans prevented by handicaps from using conventional printed materials. Among others, there were 400,000 blind, 600,000 partially sighted, and 750,000 with neurological disabilities (Casey 13, p. 358-59). In addition, "It has been estimated that most public libraries in the United States offer some measure of service to patients in their community hospitals and custodial institutions, and that about one-third of them attempt some service to people shut in at home" (Casey 13, p. 354).

1. Functionally (or Totally) Illiterate

Though they are generally not physically handicapped, the wholly or partially illiterate are nevertheless prevented from the normal reading process, and so are included in the broad category of the handicapped in this report. Strong reliance will be placed here on a good review in this area, which nicely summarizes much that can be found elsewhere. Lyman (36) reports that the level of educational attainment which has been considered to be the breakeven point on literacy is the completion of the fourth or fifth grades, but suggests that now people should not be considered literate until they have completed the eighth grade (pp. 328,331). (What does this say about our educational system?) According to the 1970 census 6.1 percent of the adults in this country had completed the fourth grade or less. An additional 11 percent had completed only the fifth through the seventh grades, for a total of 17.1 percent of the adult population of 25 and over failing Lyman's suggested literacy criterion (see also Chapter II, Education Level Table of this study). This is a staggering figure for a country that so prides itself on its highly educated populace.

In 1969 "adult basic education" programs, designed to teach adults basic skills, had a half million enrollees (Lyman 36, p. 334). This is a huge potential public library market, if the libraries can find the right strategy for drawing in these people newly able to read, who presumably are, for a short time at least, eager to use their new skill.

These are some basic facts about the functionally illiterate; to view these facts with alarm fits the traditional thinking that assumes literacy is a precious skill, essential to all social and economic advancement. But there is another current in the writing about literacy. The very primacy of literacy in learning is being called into question (Roberts 52; Lyman 36, p. 332). Part of this might be due to the fact that printed matter in schools is seen by some in our society as a purveyor of white middle-class values and furtherance of low self-esteem for minority individuals (Lyman 36, p. 332).

But there is another, more radical part to this questioning of the primacy of literacy. Roberts says that librarians are fixated on print media. He implies that if they could shake off that fixation, they would see that no one is "illiterate" (Roberts 52, p. 305). Everyone gets a great deal of information from his environment, including from the many non-print media. It is an intriguing idea to consider: Because of the mass of information available to people through other means, many young people may lack the incentive to learn to read that they would have had in the nineteenth century. Librarians may yet find themselves pushing reading with the public as an
esoteric skill to take up, like yoga. In the meantime, if libraries utilized non-print materials more thoroughly, they might not only serve the public's needs better, but also might even snag a few people to take up reading.

Perhaps, to put it another way, the white, middle-class American culture is ethnocentric about reading. The dominant culture in American has been a print-oriented one for so long that it may be slow to recognize that illiteracy is no longer necessarily to be equated with great ignorance, as it once was. Lyman says publishers have been slow to produce learning-to-read materials that are appropriate to adult interests. Literacy programs often have to resort to juvenile materials (36, p. 333, 337). Perhaps the above-mentioned cultural bias prevents recognition that intelligent, knowledgeable adults can exist who do not know how to read.

Be that as it may, Lyman, drawing on several studies, stresses the importance of finding and using materials for literacy programs that interest the adult students. The kinds of content which have been found desirable have been described as follows: "Utilitarian practical interests or subject areas to which adults related strongly, e.g., vocations, family, community, self-improvement, are necessary. Modern content, recent knowledge and concepts, and adult and vocationally oriented materials are essential" (Lyman 36, p. 335).

The above suggestions were general; a study working with adult city core illiterates (presumably largely black) came up with the following topics of particular interest: Langston Hughes' poetry, hints on careful buying, information about better jobs, selected readings from the Bible, biographical sketches, and topics of sociological interest. They were generally not interested in childish fantasy, humor, animal stories, nor adult stories of sports, adventure or travel (Lyman 36, p. 335).

Hiatt and Drennan, in their survey of public library services for the functionally illiterate (29), came up with many of the sorts of active library approaches already discussed in the previous section.

2. Blind and Partially Sighted

The blind are served by the Library of Congress Division for the Blind and a network of 46 regional libraries, which are responsible for materials for the blind (Haas 25, p. 41; Casey 13, p. 360). Extensive Braille and tape materials are available. The difficulties involved in translation from print to tape or Braille may be eliminated if the "Optacon", a machine which will convert a picture of type to a tactile sensation, is successfully developed (Clinton 15, p. 45).

The services of the library network for the blind were extended, only as recently as 1966, to the partially sighted and all whose handicaps prevented use of conventional library materials (Casey 13, p. 360). Large-print books, first published in England in 1964, are another major help to the partially sighted. By 1971 there were about 2000 titles in print. There are an estimated four million Americans, half of them children, who have low vision and can benefit from such books.
Even with all of these aids, there are many other things the public library can do to aid the blind and partially sighted. These things are outlined succinctly in the ALA Standards for Library Services for the Blind and Visually Handicapped (2). There it is stated:

The community library should be fully informed about state resources and services, should draw on them as needed, and should exert its best efforts to put blind and visually handicapped persons in contact with them. However, the existence of a state or regional facility does not relieve the community library of the responsibility to serve its blind and visually handicapped constituents (pp. 36-7).

The major recommendations by the ALA Standards for library service for the blind are listed below. First, suggested services of all librarians are listed, and then suggested additional activities for larger libraries are given.

The local community library:

Maintains a file of sources of current information describing the library services available to blind and visually handicapped readers from state and national agencies.

Maintains a file of Library of Congress catalogs of books available in all forms for blind people of all ages.

Has at least one qualified staff member whose duties consist of, or include, primary responsibility for assisting blind or visually handicapped readers in locating information and materials, and for providing guidance in the use of available resources.

Maintains a register of local individuals and organizations available for service as transcribers, personal readers, etc.

Includes blind and visually handicapped persons in library group activities such as story hours, lectures, and discussion groups.

Larger libraries should in addition:

Provide reference materials in Braille with, as minimum requirements, an encyclopedia, dictionary, and atlas in Braille and/or in media the visually handicapped can use.

Maintain a browsing collection, on loan from the state or regional library for the blind, of at least five titles for each active reader.

Provide a suitable study area for blind or visually handicapped readers who wish to make use of the library's print collection with the help of personal readers.

Provide optical aids for access to printed materials by visually handicapped people.

Provide magnetic tape equipment for the recording of information from the print collection by staff members and/or volunteers (2, pp.37-39).
3. The Deaf

Limper (35) explains that because the deaf person lacks feedback on sounds, he is slow in picking up reading. The verbal language with which the young reader links up the printed work is less well developed for the deaf person. She stresses the use of visual materials of all kinds, as well as the use of another major medium—storytelling. The library media standards for deaf schools also stress the importance of both visual media and storytelling (3, p. 10). The latter aids the deaf person in mastering lip-reading and the more complex natural language (as distinct from the somewhat simplified hand language) he needs to read properly. Limper also mentions that several bibliographies of materials suitable for the deaf have been compiled by experts (p. 10).

4. The Mentally Retarded

"...Library service to the mentally handicapped has been a long-neglected field" (Anon 4, p. 27). The following have been suggested as reasons for this situation: "The traditional inflexible library 'image' which stressed reading, the lack of money in schools and institutions for 'trills', a pre-audiovisual era in libraries..." (p. 27).

At least three percent of the general population suffer from some degree of mental retardation (4, p. 27). Even for those in institutions it has been recommended that they be allowed to visit local libraries in the same manner as local citizens (MR Stds. 49, p. 37). The proposed standards for library service to the mentally retarded in institutions recommend that the patients be given all the usual forms of library materials, and suggests the following activities:

- Storytelling with listener participation through games or other activities.
- Reading aloud, including "reading" pictures.
- Film or filmstrip programs.
- Listening to recorded media.
- Media discussion groups.
- Library clubs.
- Touching, browsing, exploring, or naming sensory stimuli.
- Creative writing, including group composition through dictation, tape recording, etc.
- Puppetry, including the making of puppets.
- Creative dramatics (MR Stds. 49, p. 37).

The following suggestions in the way of services and materials have been made for public library services to the mentally retarded:
The public library can help these users through providing books written with low-level vocabularies, high-level interest; simplified cookbooks, magazines, books with many illustrations for information about the world around them, books with large print which are easy to read, story hours, film programs, phonorecords, framed pictures that can be borrowed to decorate their rooms, talking books ... but most of all, the public library can offer a friendly place where the retarded person's needs for learning and leisure can be fulfilled (Bialac 7, p. 31).

5. Physically Handicapped and Shut-Ins

A 1965-6 survey showed that 6.1 million (3.2 percent) of the total non-institutionalized population had some degree of mobility limitation (McCrossan 38, p. 486). Certain physical devices have been mentioned as reading aids to the handicapped: page turners, reading stands, prism glasses, and magnifier view tables (Hannigan 26, p. 16). On the broader level of getting the books to the people, several patterns are followed: books mailed out in response to a telephoned or mailed request, volunteer-staffed delivery to shut-ins, and "visiting librarian" service (38, p. 487).

Other than this, the literature is vague about specific kinds of materials or services. This is the closest found: "The ideal criterion was to motivate latent interests or potentials which could stimulate self-sufficiency and an increased sense of well-being. Hobbies, self-employment, the furthering education, and encouragement to participate with groups were other goals, but we never imposed our tastes or attempted to 'uplift' theirs" (Dudley 17, p. 54). This sort of psychological goal in working with people sounds very much like bibliotherapy, that line of library work in which a person's emotional needs and problems are considered and reading materials used for a therapeutic goal (59).

6. Prisoners

The unique needs of prisoners are particularly for materials that will prepare them for the outside world, and for legal reference. Aside from these, their needs are much the same as those of adults everywhere. Since there are a high number of functional illiterates among prisoners, however, they frequently have a need as well for the easy-to-read sort of materials provided to that group (Casey 13, p. 356). (See "Functionally (or Totally) Illiterate" section.)

The need for this across-the-board range of materials is asserted by the American Correctional Association's Manual of Correctional Standards (34, cited in Casey 13, p. 355, 356). Prisoners are often deprived of the full range of materials (Rittenhouse 51) for a variety of political and social reasons. Improvement in service to them must start at the fundamental civil rights level.

7. Summary

The needs of the handicapped are highly particular to the handicap
involved. In general, it can only be said that their needs have to do with mobility—getting the people together with the material—and compensation for the handicap. In the matter of reading, compensation must necessarily be greatest for the blind.
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IV. IDENTIFICATION AND FORMULATION OF TENTATIVE SPECIFICATIONS FOR POST-1975 LIBRARY/INFORMATION SERVICE

A. INTRODUCTION

The National Library Commission has as one of its charges the planning and evaluation of library and information service on a nationwide basis. To meet that charge, the Commission needs to have a clear delineation of the basic objectives or specifications for this service.

It should be noted that national planning efforts by any group other than the Commission will also need a clear statement of system objectives. This was noted and described rather well in a recent Airlie House meeting on national network planning:

The methodology required for effective national network planning needs to provide more emphasis on goals and objectives than is provided by most system design approaches. The goals and objectives of information networks are derived from a multiplicity of desires and intentions of information users and the institutions that serve them, balanced against known and foreseeable constraints. A good methodology for network planning should be sufficiently flexible to allow for the different goals and objectives of individual networks and network elements. It should help the users of the methodology to differentiate between ultimate goals, long-range goals, midrange goals, and short-range goals in order to avoid confusion about the various possible time frames for planning. (Cuadra)

This study reviewed this topic of objectives and specifications for information service, and made a few initial specification statements to be considered as starting points for subsequent discussions.
B. OBJECTIVES, STANDARDS, AND SPECIFICATIONS

The terms objectives, standards, and specifications have been used rather interchangeably by some persons, but they do have differences in meaning that are important for this report and for national planning. The differences will become more apparent as these topics are discussed in the following sections, in the context of national system planning.

1. Objectives

a. Present Practice

The objectives represent the statements of purpose, or the mission statements for a system. They are usually presented as short statements of general policy or principle, and are seldom specific enough to be used as a basis for an evaluation of any specific system. For example, the Public Library Inquiry in 1949 confirmed that official opinion and the vast majority of librarians agreed with the following objectives:

(1) To assemble, preserve, and administer books and related educational materials in organized collections, in order to promote, through guidance and stimulation, an enlightened citizenship and enriched personal lives.

(2) To serve the community as a general center of reliable information.

(3) To provide opportunity and encouragement for children, young people, men and women, to educate themselves continuously (Leigh).

A good historical review of modern statements of purpose for public libraries, and their changing areas and priorities of concern is given in the book by Murison.

During the course of this study, it was a surprise to find that many libraries did not have any written statement of purposes or objectives. In many instances the staff members could not answer the question, "What is the job that your library is trying to do?" This observation has been made by others who have been interested in library objectives, e.g.:

It is characteristic of libraries and of other institutions that they operate either without objectives or that, when called upon to produce a policy statement, they produce either cliches or statements of objectives designed to cover the entire field rather than any particular institution. (Blasingame, 1972)

It is not clear why so many libraries are presently without objective statements, particularly when the ALA Minimum Standards for Public Library Systems, 1966 states (p. 28) that, "Each library system and each library within the system shall adopt a written statement of clear and specific objectives, subject to periodic review and revision."
Systems that operate under Program Planning and Budgeting Systems (PPBS) require written objective statements, and this has initiated some recent writing efforts in many libraries (Howard). Furthermore, each State Library recently had to prepare a long-range plan as part of its obligation under the Library Services and Construction Act, and all of these plans have included some type of objective statements. Several of these LSCA state plans have been published or made available for others to review, and provide a wide variety of objectives statements ("Indiana"; Jones; Kemper; "Long Range Programs for the State of Washington"; Maryland; "Meeting").

Many of the mission statements given by individual libraries are to a certain extent directed inward for self-seeking institutional goals instead of being stated from the point of view of the user or potential user. For example, consider the following paraphrased extracts from the mission statements of several public libraries:

A major objective for this year is to:

- Get more financial support and a new building.
- Seek maximum outside funding from state, federal, and private sources.
- Bring more people into the library.
- Treble the borrower registration figures.
- Protect materials from mutilation, theft, and delinquent users.

Some objective statements are very general, such as the ALA Library Bill of Rights, or the UNESCO Public Library Manifesto, whereas some libraries have very specific objectives statements that are prepared each year for each of their major departments. It would seem to be appropriate to have both kinds of statements, with the operational statements evolving from the general statements. The general goals are important, and should be established first; this is what happens in many libraries, but the effort often stops at that point without setting more specific objectives.

Objectives statements have been prepared on national, regional, state, and local levels. Many of the statements prepared initially as national statements of objectives seem applicable to local facilities.

b. The Quest for More Specific Objectives

As mentioned earlier, most library objective statements are so general that they are of relatively little value for purposes of measuring library performance (i.e. the degree to which the library is meeting these objectives). One author notes that

The major difficulty concerning the stated public and university library objectives is that they do not yield criteria for evaluating alternative policies. They are
not helpful in determining how well the library is performing nor how proposed plans and alternative decisions may affect this performance. (Hamburg)

There are many reasons why a library's objectives are stated in general terms (e.g. only the most general statements stand a chance of approval by some library trustees or governing boards; general statements don't have to be changed very often, but more specific objectives might have to be frequently modified at some inconvenience; some library administrators would prefer the freedom and flexibility of very general mission statements). However, it is both possible and desirable, and in some cases necessary, to be more specific in the formulation of objective statements. As some librarians have already discovered, the recent requirement at some governmental levels to use Program Planning and Budgeting Systems (PPBS) for library management reporting purposes requires the formulation of rather specific objective statements.

Where possible, objective statements should be cast in operational terms, and in ways that permit some measurement and enumeration of the extent of fulfillment of the objective. Examples of such specific statements are those prepared by Kemper and the Nebraska Library Commission as part of a statewide master plan; a few examples of which are given below:

By January 28, 1977, the needs of:

1. 90% of talking-book oriented individuals will be satisfied by special residence and direct library service at the state, network, or regional level.

2. 25% of talking-book oriented individuals will be satisfied by first class library service in the region.

By January 28, 1977, the needs of:

1. 35% of 5-16 year olds, non-students, will be satisfied by first class library service at local levels.

2. 50% of 5-16 year olds, non-students, will be satisfied by first class library service at the regional levels.

3. 50% of 5-16 year olds, non-students, will be satisfied by second class library service at the local level with supplementary library service through a first class library within their community or at the regional level.

By January 28, 1977, the needs of:

1. 25% of job-related adults and researchers will be satisfied by first class library service at the company or organization level.

2. 60% of job-related adults and researchers will be satisfied by second class library service at the company or organization level.
Another example of a specific, measurable objective is provided by the Richmond (California) Unified School District:

By the end of May, 40% of pupils who have had a regular instructional program in library skills by a qualified library staff member will demonstrate increased ability in using library resources (i.e. card catalog, Dewey Decimal Classification system, basic reference materials, etc.) dependent upon skill limitation for each grade.

It does seem clear at this point that while it may be rather difficult to formulate library objectives in more specific measurable terms, it is definitely worth the effort to continue this attempt at both local and national levels.

2. Standards

Standards are a norm or a basis for comparison or evaluation. A standard can designate any measure by which one judges a thing as authentic, good, or adequate. Stated in another way, a standard is an acknowledged measure of comparison for quantitative or qualitative value; criterion; norm; a degree or level of requirement, excellence, or attainment.

Library standards may be defined as the criteria by which... library services may be measured and assessed. They are determined by professional librarians in order to attain and maintain the objectives they have set themselves. Standards may be interpreted variously as the pattern of an ideal, a model procedure, a measure for appraisal, a stimulus for future development and improvement and as an instrument to assist decision and action not only by librarians themselves but by laymen concerned indirectly with the institution, planning, and administration of... library services. (Hirsch)

Both on a national and local level, librarians have been interested in standards for many years, and there have been many efforts to establish standards in one form or another:

At its mid-winter conference of 1916, the American Library Association appointed a committee of five... to study the matter of "standardization of libraries and certification of librarians". (Blasingame, 1953)

And as noted in a paper written over 20 years ago:

Librarians individually and in meetings of the California Library Association have, over a period of time, called attention to the lack of, and need for, workable standards against which to measure library performance. ("California Public Library Standards Project"
The first formal standards for public libraries at the national level appeared in 1933, and have been promulgated by ALA at intervals since then, with the latest version published in 1966 and felt by many to be out of date. Various states have adopted library standards, but for the most part these have been adaptations of the national statements (Martin, 1972). Standards documents have now been developed on a national level for many types of libraries and library services as indicated by the following brief sample of publications:

- ALA Standards for College Libraries.
- Objectives and Standards for Special Libraries. SLA. 1964.
- Standards for Library Functions at the State Level. ALA. 1978.
- Standards of Quality for Bookmobile Service. ALA. 1963.
- Young Adult Services in the Public Libraries. ALA. 1960.

The standards usually make reference to themselves as minimum standards, and tend to indicate what can be achieved, rather than what should be achieved. Martin states that:

"Existing standards for libraries represent the "wisdom of the seers." Librarians assert from experience that certain measures should be achieved to have a "good" library. It follows that these measures carry more weight among other librarians than they do among nonlibrary authorities and the public at large. (L. Martin, 1972)

Many critics note that the present standards cannot provide a meaningful test of the value or quality of a specific library. For example, a library could: meet the suggested volume counts but still have a very poor collection; meet the suggested patron registration figures, but circulate very few books; and have the suggested level of fiscal support, but spend the money very foolishly. It is argued by some that the standards are much too subjective, do not lend themselves to measurement, the results of their application may not be reproducible, they do not include or consider enough significant variables (e.g. specifying collection sizes, without consideration of the type, quality, or content of that collection), and they do not consider local objectives. These charges are acknowledged, but countered by other spokesmen such as Wheeler, who stated:
National standards, set forth to contrast with local performance, and adequately publicized, have doubtless done more—more promptly than any other device—to help good administrators improve conditions in public libraries. (Wheeler)

The same point of view is expressed by Downs:

There can be little doubt, however, that the overall effect of standards has been to upgrade libraries, providing sub-standard institutions with yardsticks by which to measure their deficiencies. (Downs)

Some of the continuing criticism of the present type of standards may be lessened as more work is done on the development and testing of performance standards and other means of library evaluation.

Much of the above discussion, and most of the current thinking about standards is done in the framework of national standards. However, it should be noted that there is also the point of view which says that library specification, design, and evaluation efforts should be done locally by the people responsible for the funding and operation of facilities to serve locally-determined needs and priorities. Thus, if the trustees of a particular public library feel that the top priority service efforts for their library are to lend camping, recreation, and other leisure equipment, and to conduct and support a program of do-it-yourself and craft courses, then there is questionable meaning to an evaluation of this facility using non-local standards. That is, it may be inappropriate to apply a national standard to any library without some consideration of local factors. There is a somewhat parallel situation in the education field; that is, if a local community wanted its school to concentrate its instruction on vocational training, how appropriate are the national standards and achievement tests?

3. Specifications

a. Present Practice

Specifications are the detailed and precise presentation of a plan or proposal for something. The chief designer of a proposed commercial airplane, for example, would be given many specifications such as number of passengers and crew, flight range, and altitude, maximum construction and operating costs, cruising speed, takeoff and landing distances, and required food services, and would direct the design effort to meet those specifications. The designer, working within the constraints of the specifications, generally has the freedom to develop many different designs that can meet the specifications; this is possible because the specifications are usually written in a way that does not necessarily dictate the design.
A designer of an information system can work in the same way, if the corresponding specifications can be provided. Unfortunately, there has been little success to date in formulating or articulating such specification statements for national library or information services. A number of people have suggested that it is not possible to develop any such specifications on a national level that would be meaningful for planning or design purposes. However, the next section of this report provides some initial specification statements, primarily as examples for further work, and an indication of the feasibility of establishing such specifications.

b. Sample Specifications for National Library and Information Services

The approach taken for this exercise was to assume (contrary to present facts) that there were no public libraries or any other types of library or information services presently available for the people of this country. Given the additional reasonable assumption that there was a need throughout the country for such library and information services, the next step was to tell the designer and information systems architects what to design. That is, what are the characteristics or specifications for the national system that we want them to design. With this initial setting and problem assumptions, we could then say to the designers, "We want you to design a national library and information system that has the following features." The designers responding to this charge, might then formulate some specifications such as the samples shown in Tables 3-5. These samples do illustrate the fact that it is possible to develop such specifications. These tables could be expanded and refined with additional study efforts.

The intent of the work described in this chapter was to explore the feasibility of establishing specifications for national library and information service. It does appear to be quite feasible, although difficult, to establish such specifications. The development of a full set of specifications for national information services would take a considerable effort, and should be done in consultation with many concerned people. However, it was possible for demonstration purposes to develop the starter list (Tables 3-5) of some sample specification statements for demonstration purposes and to serve as a basis for further discussions on this topic. Most of the specifications in Tables 3-5 are based on previously-published statements from other sources. The specification statements are given in the general topic groupings of 1) facilities and services to be provided; 2) patron's access to facilities and services; and 3) holdings of the facilities and services.
C. OBSERVATIONS

After reviewing the literature and the background of this issue of objectives, standards, or specifications, and attempting to pose some tentative specifications, several points become rather clear:

1. Even with their limited utility for evaluation purposes, it would be worthwhile to continue the effort to upgrade many of the current national standards discussed in the report, expanding their scope, and incorporating the latest thinking regarding the general function and objectives of public information services.

2. It would not be possible to develop a complete set of meaningful objectives, standards, or specification statements during the course of such a brief effort as this preliminary study.

3. It is very difficult to formulate specification statements that are both general enough to cover most situations, as well as specific enough to be used as a basis for design or evaluation efforts. However, it does seem to be definitely worth the effort to continue the attempt to develop such specifications, at both the local and national levels.

4. The National Commission on Library and Information Science is the appropriate organization to take the lead in this national system planning effort, and is encouraged to do so.
The facility should assume the role of the major public forum for the presentation and discussion of topics of interest to the community, and should provide the physical facilities that adequately support these activities. A service institution such as the library must be closely related to the community, and to the predominant interests of local people, to serve the information needs of the library's clientele. The library should welcome the use of its meeting rooms for socially useful and cultural activities and discussion of current issues. The meeting rooms should be open to the public, and the library should provide facilities for the presentation and discussion of topics of interest to the community. The library should also provide support to all groups in the community, regardless of their beliefs and political affiliations. The facility should assume a university role.
FACILITIES AND SERVICES TO BE PROVIDED

Specifications

4. All materials should be available for use outside the facility, except those used frequently for reference service, and rare and fragile items.

5. Materials used regularly should be available to the patrons without unreasonable delay.

6. Copying equipment or services should be readily available to simplify the patron's notetaking and duplication of selected materials within copyright constraints.

7. Information about the holdings of the facility and the holdings of the total system should be readily available to each patron.

8. Arrangements should be made to transfer or loan materials from one facility to another.

9. The facility should provide information and research services.

Related Statements From the Literature

Libraries of all types should identify closely with their special clienteles, and their services should be immediately relevant to them. (California Library Network, Master Plan.)

All materials should be available for use outside the library except those used frequently for reference service,... (ALA Minimum Standards for Public Library Systems, 1966, p. 30)

Materials used regularly should be in the collection of each community library in sufficient duplication to prevent unreasonable delays in meeting the needs of the community. (ALA Minimum Standards for Public Library Systems, 1966, p. 40)

Copying equipment should be provided for individual use for duplication of single copies of materials, within the legal restrictions of the Copyright Law, to give maximum service to the public. (ALA Minimum Standards for Public Library Systems, 1966, p. 30)

Information about the holdings of the total system should be readily available to each unit. (ALA Minimum Standards for Public Library Systems, 1966, p. 31)

Each library should design lending and intra-agency loan practices which make for uniform, coordinated service over the whole area served. (ALA Minimum Standards for Public Library Systems, 1966, p. 31)

Library systems should provide informational and research services. (ALA Minimum Standards for Public Library Systems, 1966, p. 31)

Table 3 (cont'd.)
The facility should incorporate the means to inform potential users about the availability and utility of the system, and how to make use of it. Areas and desk space for individuals desiring study spaces, regardless who desire study spaces, regardless of whether or not they use any of the facilities in the facility, should be provided. The facility should include sufficient areas and desk space for individuals who desire study spaces, regardless of whether or not they use any of the materials in the facility.

10. The facility should incorporate the means to inform potential users about the availability and utility of the system, and how to make use of it. The facility should include sufficient areas and desk space for individuals who desire study spaces, regardless of whether or not they use any of the materials in the facility.

11. The facility should include the means to permit the more positive exchange of information and broadcast of information, in addition to fulfilling only the more passive on-demand requests for information.
PATRON'S ACCESS TO FACILITIES AND SERVICES

Specifications

1. The information services and facilities should be accessible on equal terms by all members of the community; an individual's access to the facilities or services should not be denied or abridged because of the individual's age, sex, race, religion, national origin, economic class, physical or mental limitations, English-language skill, place of residence, occupation, geographical location, or social or political views.

2. The information services and facilities should be made equally available and accessible to all members of the community, especially those that are geographically distant, or otherwise restricted in their physical access to the services and facilities.

Related Statements From the Literature

...the public library should be...open for free use on equal terms to all members of the community, regardless of occupation, creed, class, or race. (UNESCO Manifesto)

The rights of an individual to the use of a library should not be denied or abridged because of his race, age, religion, national origins or social or political views. (Library Bill of Rights)

The Master Plan aims to insure that, insofar as possible, all people have free, realistic, and convenient access to all library resources and services that might enrich their lives, regardless of the accident of their residences or the economic conditions of their local governments. (California Library Network. Master Plan.)

Every individual should have access to library service freely available in his local community. (ALA Minimum Standards for Public Library Systems, 1966)

Objective: (Unserved)--To ensure that public library services are available to all citizens of Washington. (Long-Range Program for the State of Washington)

...the library's service should be brought close to the homes and workplaces of the people by means of branches and mobile units. (UNESCO Manifesto)

Table

Sample Specifications for National Library and Information Services—Patron's Access to Facilities and Services
The community library should be easily reached and to use.

A reader should have access to the entire library resource and services in the state.

A local community library service should be within 15-20 minutes driving time in metropolitan areas (200,000 or more people), and 60 minutes driving time in non-metropolitan areas (200,000 or more people) and 90 minutes driving time in metropolitan areas (200,000 or more people). Reader subject centers should be within 90 minutes driving time.

Local community library service should be within 15-20 minutes driving time in metropolitan areas (200,000 or more people), and 60 minutes driving time in non-metropolitan areas (within reach of 150,000 people). Reader subject centers should be within 90 minutes driving time.

Community services should be in general 30 minutes driving time or less, and the reader subject centers should be within 90 minutes driving time.

The information service should be available as free services to the user.

The services should require no previous training of the patron in the use of these services.

The services should be readily and conveniently for the patron to receive.

The services should be available as free services to the user.

The information services and facilities should be available as free services to the user.

The information services should be rapid and convenient for the patron to use.

The concept of the community library is an integral part of the challenge of California.
HOLDINGS OF THE FACILITIES AND SERVICES

Specifications

1. No library materials should be excluded because of the race, national origin, or the social, political or religious views of the author or publisher.

2. Materials should be provided that present multiple and balanced points of view concerning major problems and issues.

3. No materials should be removed from the facilities, and no services discontinued solely because of the disapproval of special interest segments of the community.

4. The facility should provide information on whatever content, and in whatever forms are appropriate and helpful for the community.

Related Statements From the Literature

In no case should library materials be excluded because of the race or nationality or the social, political, or religious views of the authors. (Library Bill of Rights)

Libraries should provide books and other materials presenting all points of view concerning the problems and issues of our times. (Library Bill of Rights)

It is the special duty of the public library to provide materials on controversial issues and, insofar as possible, to represent all shades of opinion in its collection. ("Proposed Public Library Service Standards for California")

...No library materials should be proscribed or removed from libraries because of partisan or doctrinal disapproval. (Library Bill of Rights)

The complete public library should provide: books, pamphlets, magazines, newspapers, maps, pictures, films, music scores and recordings, and give guidance in their use. (UNESCO Manifesto)

To ensure quality service, all sources of information and all forms of material must be consulted. (ALA Minimum Standards for Public Library Service, 1966. p. 31)

Table 5

Sample Specifications for National Library and Information Service—Holdings of the Facilities and Services
HAPOO OF THE FACILITIES AND SERVICES

Related Statements From the Literature

...create and maintain a relevant, current collection of book and non-book material for specialists, students and casual users in all fields of interest, and to enhance the collection in response to implicit as well as explicit community needs.

(San Jose Public Library, Statement of Goals, 1970.)
D. REFERENCES


Hirsch, Felix E. "Introduction: Why Do We Need Standards?" Library Trends 21:2 (October 1972) 159-163. (This entire issue is devoted to library standards.)


Library user studies have been made for decades and in recent years have shown a rapid growth rate. Although many public libraries have conducted their own small-scale surveys, relatively few extensive reports have been completed regarding public libraries. Computerized information systems have, on the other hand, been studied in detail. The proliferation of such reports reflects the funding patterns of the federal government. Federal policy has favored the technologically advanced information systems when contracting for research, rather than funding projects to research issues relating to more traditional library services.

One problem which arises when dealing with various studies of library/information systems is the lack of a standard methodology. Although generally studies adhere to social science techniques, absence of a standard methodology is a deterrent to evaluating results. Conclusions cannot be compared validly when there is no standard methodology that makes procedures in the studies themselves comparable.

A major fault in most library use studies is the absence of information about the non-user. The studies generally reiterate well-established characteristics of users: young, well educated, middle class, etc. One can deduce from the evidence on users who the non-user is: probably older, little educated, lower or upper class, etc. However, these characteristics do not reveal why the non-user fails to take advantage of library services. Instead of repeating definitions of the user, research reports might attempt to define the non-user and to discover how the library has failed to meet his needs and how the library could serve him in the future.

The literature also lacks definitive and substantive works on the role of the library in society with respect to other agents providing information, such as the mass media and other competing institutions. Questions especially arise as to the appropriateness of the library in providing non-print media services (especially film and videotape) on a large scale. This problem relates to the problem of defining the non-user and his reasons for not patronizing the library: if he gets his information from mass media sources, the library, in order to serve him, might have to move in that direction.

Recent literature on surveys, plans, and projections pertaining to library and information services reflects trends toward consolidation of resources, state and regional planning, and considerable analysis of users' needs and requirements. State and regional surveys consider demographic factors (existing and projected) such as population, educational, financial and industrial patterns as parameters for providing library services. Statewide studies include Baillie (1) (Idaho), Foust and Tower (8) (Indiana), Gaver (9) (New Jersey), Martin (13) (Pennsylvania), Nebraska Public Library Commission (19) (Nebraska), Nelson Associates (20) (Colorado), Stevenson (23) (Arizona). Rike's (28) annotated bibliography encompasses statewide surveys and plans from 1956-67. Regional studies define their
geographic areas in various ways: Foust and Hughes (7) divide Indiana into 14 regions, for example. Services to urban areas are studied by Bundy (4), who covers the Baltimore-Washington metropolitan area; Campbell (5), who discusses library planning in large urban areas in various countries; Monat (18) et. al., who discuss cities in Pennsylvania.

The national picture is assessed in Mathews and Lacy (15), which describes social factors relating to library services on a broad scale, and in Mendelsohn and Wingerd (16), which reviews large scale studies from 1949-67, emphasizing information on users and non-users. The Stanford Research Institute proposal (22) outlines issues related to public library analysis and future federal policies. Important for all libraries and information services is definition and analysis of the community and target groups to be served. Essays in Bundy and Goodstein (5) provide a general overview of the public library in relation to adolescents, suburbanites, urban blacks, labor, and the radical right. Bonser and Wentworth (3) divide Indiana's adult population into four groups according to occupation (general, business and industry, agriculture, labor), to analyze its information needs and libraries' response in fulfilling the needs. Meyer and Rostvold (17) analyze the public library's role in satisfying information needs of business and industry. White (25) assesses information use patterns of town and country planners in the United Kingdom. Wysocki, for the International Council of Scientific Unions (12), is concerned only with the needs of scientific users.

There are innumerable other studies of libraries, library systems, specialized information systems and users. Atkin's (26) bibliography covers use studies of public, school, and academic libraries from 1950-November 1970. Jonikas' (27) bibliography concentrates on public library surveys from 1915-1957. Bates' (2) paper provides a narrative discussion of user studies through 1969, arranged according to type of study. As mentioned above, Rike's (28) bibliography includes only state-wide library surveys and plans.

The literature on library and information services planning and methodology draws heavily from social science research. Garrison (31) is one of the earlier compilations of papers describing methodologies for library and information services. Bundy and Wasserman (30) is another compilation concentrating on theoretical aspects of research methods. Griffith (33) also has compiled papers on research approaches, covering both traditional library services and specialized information systems. Goldhor (32) uses methodology from the social sciences to present research methods for studying library/information systems. Walker has included in his bibliography works from other disciplines applicable to the library field.

Brown (29) refers to specialized information systems in her scheme for "redesign" based on users' requirements, but the general scheme may be applied to traditional library services. Urbach (38) also considers user studies as input for modifying and designing systems. Taylor (37) concentrates on requirements in planning an information center. Werner
(39) et. al. take the special atmosphere of an outpatient environment to design an information system for the scientific user. Planning for more traditional library services is discussed in Fenna (35), who stresses the lesser-developed countries, but also considers problems in industrialized nations.

Methodology for library surveys is reviewed and described in detail in Line (34), who presents an integrated discussion, and in Tauber and Stephens (36), who offer conference papers covering specific aspects of the survey. Closely related to the survey method is Richardson et. al., covering important features of interviewing techniques.
"It is the purpose of this survey to outline ways and means by which all of the citizens of Idaho may have public library service ...[This goal...might be attained by 1973, ten years hence." (p. 2) The report summarizes state trends in population and education, state and national trends in public library services, technological and population changes, and cost projections. A regional plan for Idaho public library development and a state grant-in-aid plan are detailed. Statistical data and additional information on organization and administration of the Idaho State Library are offered.

This work reviews 181 user studies published through 1968 (with some 1969 works) in a narrative fashion, dividing studies into the following categories: catalog use; reference use; library circulation (materials use); browsing and in-library use; use of the library as a whole; characteristics of library users vs. non-users; user knowledge of library and literature; attitudes toward users held by librarians; availability of materials and mobility of users; information-gathering habits of scientists; informal information transfer among scientists; use of formal sources of scientific information; sociological and environmental factors in scientific information seeking; information-gathering habits of the general public; the information system as a whole; methodology and philosophy of user studies.

This report studies the major adult markets for public library services in Indiana, dividing the population into four basic groups: general public; business and industry; agriculture; and labor. The following areas are considered, comparing the average library user vis-à-vis the general public: socioeconomic characteristics; reading habits; opinions of libraries and library services; opinions concerning financing of public libraries; response by occupation group. The business and industry survey includes discussion of areas of need for information, availability and sources of information. The section on farmers and labor considers, among other topics, the use of public libraries as a source of information for agribusiness and organized labor, criticisms of libraries, and how services to these groups can be expanded. Major conclusions are drawn from the findings.

This use study encompasses 100 library units in metropolitan Maryland's eight library systems. Scope and method are described. Each system is explored in terms of its background, including demographic, financial, and educational patterns and the nature and rates of changes adopted. The profile of library users factors influencing library use, what patrons think of public libraries, and inter-library use are detailed. Implications are included. Three appendices provide the questionnaire used, a bibliography of sources of information about Maryland, and a bibliography of public library user studies.


The papers presented in this volume do not represent user studies per se but explore various social groups and the public library's role in meeting their needs. Contents include: John E. Vajda, "Adolescence: Another Viewpoint"; Gilda Nimer, "The Suburban Reality and Its Implications for the Role of the Public Library"; Nancy Corrigan, "The Urban Negro and the Library"; Sylvia Goodstein, "Labor and Libraries"; and Mary Ann Hague, "The Radical Right and the Library."


The first three chapters assess the public library and planning in relation to the metropolitan area and municipal government. Subtopics include the metropolis in the 20th century, public library goals, determining needs of readers, finance, role of metropolitan and local authorities and planning agencies, and need for long-range planning. Library planning in four large metropolitan areas (London, New York, Los Angeles, Tokyo/Yokohama), in seven areas with 2-4 million population, and in eight areas with 1-2 million population is described in 3 chapters. The final chapter, "Metropolitan library planning in the future," considers the pattern of libraries and systems in both underdeveloped and advanced nations. Index.


The authors have defined fourteen relevant geographic planning regions in Indiana to inventory the present library facilities and project the need for future resources based on population forecasts. Existing library and information services are assessed
in terms of the following: public libraries; college, institutional and business libraries; school libraries; and special services. Future demand for library services are project only in terms of book circulation. Regional expenditure implications for future library needs are evaluated. The equation used to predict future circulation is presented in detail in an appendix.


This report inventories present demographic variables relevant to providing library services in Indiana, and makes forecasts through 1990. The state's population projections are made with emphasis on the total Indiana population from 1970 to 1990, age and sex variables, and projected geographic distribution. Educational attainment, personal income, and employment are other areas covered.


Nine papers presented at this symposium outline and evaluate New Jersey's statewide plan resulting from a survey of all types of libraries in the state. Of particular importance for future planning of library and information services are the following: Ralph W. Conant, "The Public Library: Today and Tomorrow," (pp. 67-93, including comments) which discusses expected future trends in the cities and implications for public libraries; Milbrey L. Jones, "School Media Programs: Progress, Obstacles, and Promising Developments" (pp. 45-66 with comments) which considers evaluation, demonstration programs, dissemination of program results, and leadership, direction and technical support as important in effective future planning; and James R. Watson, "Manpower Implications of New Jersey's State Plan" (pp. 121-145, with comments) which identifies fundamental characteristics of modern personnel and manpower systems and how these should apply to staffing in the library field, present and future.


The purposes of this project were "to make the most efficient use of reference resources and materials useful to students in public libraries and, to provide supplementary materials on short-term loan to public libraries on request." (p. 1) Accordingly, Part I the user survey, includes statistics on use and subgroupings of users in the public library; similar information on users and non-users in the secondary school. Part II, the public library-school relations project, details the coordinated program and services established among public and secondary school libraries; reactions to the project by school librarians and teachers; and recommendations of the advisory committee. Detailed statistical tables on library use appear in an appendix.

This report evaluates an experimental "outreach project" to meet the information needs of representatives of business and industry. Major findings, conclusions, and recommendations of the Meyer and Rostvold market survey are included. Descriptions of all phases of the demonstration project (direct mailings of a business news bulletin, visitation program, project publications, public information program) are detailed. The study also covers prospects for interlibrary cooperation, untried ideas, effects of the project on participating libraries, a user study focusing on the businessman's response to the program, and a proposal for a permanent program integrated with the cooperating libraries' other services.


This report is concerned with "problems of broadly apprehended studies on the users' needs, a concept which embraces multi-aspect investigations on the sources and services of scientific information, from the point of view of one user or of a group of users." (p. 3)

Methods of investigation discussed include division of users into categories; division of the needs into categories; questionnaires, diaries, interviews, and observations. The main emphasis is on scientific specialists as users but conclusions and criticisms of investigative techniques may be applied to other populations. Bibliography of use studies. (24 items, 1956-67)


This state plan reviews current status of Maryland libraries and identification of needs for the State Library Agency, public libraries, state interlibrary network, school media services, services to the institutionalized, the blind, and the physically handicapped. The report also outlines assessments of needs; goals and objectives; and priority programs.

This report draws heavily from the authors' earlier report *Social Change and the Library, 1945-1960* (prepared under a sub-contract to the National Book Committee and submitted to the National Advisory Commission on Libraries in 1967), using national trends "as a framework to the Indiana-oriented study of library futures." (foreword) Social changes stressed are growth and redistribution of the population; growth of knowledge and recorded information; changing educational and occupational patterns; emergence of the communications-centered culture; and the library's response to all of the above issues. Other areas covered include financial problems; appropriate applications of technology; planned sharing of resources; libraries as agents of change; library responsibilities in the next decade.


This report considers public and academic library use with recommendations following the findings. A literature search covered large scale studies from 1949-1967. The authors review their collective findings related to users and non-users. A Gallup poll investigated attitudes towards, and use of, libraries among adults. Personal interviews and questionnaires were techniques used in determining attitudes and opinions of 14 library experts regarding library and usage. The conclusions and recommendations point out limitations in library usage research, recommendations for improvement, and need of libraries to re-examine their roles in a changing society.


This report transmits information on public library service to business and industry. Interviews, questionnaires, and related studies were considered. Sections analyze information needs and sources of supply; use of the public library by businessmen; role of the public library in serving the economic community; evaluation of the public library; methods of support from the economic community; cooperative relationships for total library resources; and a demonstration project is proposed. References are included.


This study provides an assessment of the public library in Pennsylvania in relation to the following issues: composition of the library's public; attitudes of library users and non-users toward the public library; determination of how well the library meets
the needs of its users and the community it serves; the public's use of the library; determination of the library's role as service agency and its place within the total community. Demographic, political, and community attitude variables are defined and considered in identifying library users and non-users; tables expressing findings are provided. Implications of the findings are discussed in the concluding chapter. In general, many findings of Berelson's classic study are still found valid.


This survey inventories the existing services in all of Nebraska's libraries (public, academic, school), and the services of the Neb. Public Lib. Comm. Population, economic and governmental trends are discussed with assessment of their impact on future library services and development. Results of the survey are included; general recommendations for future library planning are made.


Findings and recommendations of this study cover public, academic, and state agency library resources and needs, and implications for a coordinated state program. Section I, library development in Colorado, considers population patterns and industrial signposts in assessing needs and prospects. Section II covers state-federal funded programs; Section III, financial implications of such programs; Section IV, administration of State Library; and Section V, steps toward implementation of major recommendations, both immediate and future. Three appendices cover estimated costs, a system development, and the grant-in-aid program formula for the proposed public library system program.


"The present '1967 Re-survey' has two essential purposes: To determine the extent to which the 1958 Pennsylvania library program has been achieved; to propose a revised or new program to meet present and emergency library needs in the Commonwealth." (p. 1) The 1958 report is summarized with reasons for its inapplicability for 1967 through the 1970's. The present and the predictable future are studied in terms of population, economic, and educational trends; emerging demands on libraries; changing organization and methods of library service. Among other topics, the report examines the lack of local public library service; small and weak libraries; inter-library loan; the public library's limited social base; role of distinct centers; and statewide development of resources. Recommendations are based on the survey's findings and projections made. The appendix covers user evaluation and user characteristics in addition to studying time and distance factors.

This proposal sets as its objective "an examination and assessment of selected aspects of public libraries that will result in a practical plan for an analytical design and data collection methodology to be applied in a later study." Emphasis is on issues relevant to potential future federal policies. Method of approach, as outlined, includes review of the current state of public libraries; formulation of effectiveness definitions and criteria; outline of alternative futures; assessment of federal support alternatives; preparation of analytical design and data collection plan.


This report covers the present state of library service in Arizona, a forecast of future needs and resources to meet these needs, and a comprehensive plan for statewide library services. Inventories of collections, personnel, physical facilities and budgets for public, school, academic, and special libraries are included. Services of the State Department of Library and Archives are described. Demographic data given encompasses population growth trends and projections, geographical distribution of the population, and a brief description of economy and government. A recommended plan for Arizona library services is detailed (pp. 92-100).

Bibliography.


This study considers the Chico General Plan, outlining long-range plans for the city in light of its impact on library service. Principles for city planning have been used as the approach to forecast library needs over a 20-30 year period to suggest policies to satisfy needs, and to state alternative courses of action to carry out the policies. Recommendations cover building progress and organization for service, community service, materials, personnel, organization and control of materials. Sections encompass factors affecting library service of the study in Chico in 1961; description and evaluation of the Chico Public Library in 1961, forecast of population, economic and physical growth of Chico, 1962-1985, including factors affecting library service; and needs of the Chico Public Library, 1962-85, as measured by library standards.
This report details a survey of town and country planners in the United Kingdom to determine their present use of various information sources in order to assess information requirements and propose an information service. Operational, problem-solving, current awareness, quick reference, and unpublished information use patterns are studied; methodology is also presented. A survey of library resources is similarly described. Recommendations to improve provision of planning information are included (pp. 117-196) and designated as short-, medium-, long-term, or future.

Bibliographies


Use studies of public, school, and academic libraries in the United Kingdom, United States, and Canada are classified in a subject scheme (the CRC scheme for library science), with an alphabetical subject index included. Use studies of special libraries are excluded. Informative annotations are provided for most entries.


This bibliography includes 280 surveys from 1915-1957, categorized in two parts: general surveys and those of particular departments or problems. The latter part is further subdivided as follows: building and location; branches and extension; projects and programs for library planning; library users (including opinion surveys and hearings); and readers' services; organization and administration; personnel; other particular departments; statistical reports; and miscellaneous. Two indexes provide access by region, state and place, and by population group served.


All known statewide library surveys and development plans published between Jan. 1, 1956 and Dec. 31, 1967 are included, arranged alphabetically by state and chronologically within each state. Some regional surveys also have been included. Background and summary of each entry is provided. An appendix cites publications bearing 1968 imprints.
Methodology


The author outlines three phases in evaluating adequacy of current systems, and subsequently recommending and planning changes to improve services and efficiency. The analysis phase includes definition of mission and objectives, examination of systems, and operational analysis. The evaluation phase encompasses study of users and services, examination of inputs, review of storage and handling, and specification of system requirements. The design phase is development of the improvement plan. Emphasis is given to a systems approach.


This volume contains 28 papers covering theoretical bases of research, conceptual approaches, research design, methodology, and environment of research. Of particular interest in approaching user studies, determination of needs, and planning of library/information services are the following articles: Philip H. Ennis, "The Study of the Use and Users of Recorded Knowledge" (pp. 137-144); William J. Paisley, "Information Needs and Uses" (pp. 145-150); and Richard H. Orr et al., "Development of Methodologic Tools for Planning and Managing Library Services." (pp. 186-191) Bibliographies cover social science research methodology and library research.


The following papers in this issue are applicable to studying methodology for library and information science projects: Maurice F. Tauber, "Survey Method in Approaching Library Problems" (pp. 15-30), which provides a general discussion of the nature, approaches, limitations and results of the survey in relation to individual libraries and systems; David R. Krathwohl, "Experimental Design in Educational Research," (pp. 54-67), which considers variables, hypotheses, and the function of experimental design; Patricia Knapp, "The Methodology - Results of the Monteith Pilot Project" (pp. 84-102), which describes anthropological and sociological research techniques used in investigating library competence and use of students; Mary Virginia Gaver, "Research on Effectiveness of Elementary School Libraries" (pp. 103-116), which describes development of research design, application and administration of certain measures; and Frank L. Schick, "The Coordinated Collection and Individual Use of Library Statistics" (pp. 117-125), which discusses the role of statistics in library research.
Part I, "The logical design of a scientific research study," covers the scientific method of inquiry; application of scientific research to librarianship; role of theory; hypothesis; causation and proof.

Part II, "The collection and analysis of data," includes historical research; survey research; statistical methods; experimental research; analysis, interpretation, and presentation. The author draws on methodology from other fields, stressing useful and relevant techniques for studies related to libraries and librarianship. Selected references and bibliography.


This issue presents seven papers which focus on the possible contributions of research to improving library and information services. Diana L. Davis, "New Approaches to Studying Library Use," (pp. 4-12), considers methodology of studies dealing with scientific and technical information users, and how the methodology might be applied to general library situations. Mary Hilda Ebert, "Contrasting Patterns of Specialized Library Use," (pp. 13-27), summarizes recent major studies of specialized users and examines their methodologies and results. Priscilla Rose, "Innovation and Evaluation of Libraries and Library Services," (pp. 28-41), emphasizes the need for research in designing and evaluating information systems; problems, methods, and techniques of measurement and evaluation are covered. Suzanne Y. Felten, "Attitudes and Values Associated with Information," (pp. 42-47) reviews the needs of determining the social context of information and the various parts of the total information institution in science. Elaine Zaremba, "Public Library Surveys," (pp. 48-55) examines major problems associated with surveys. Paul Chervenie, "Library Catalogs in American Academic Libraries," (pp. 56-64) discusses research on card catalog use and possible applications of information science techniques to the library catalog. Charlotte K. Lucas, "Considerations in Planning Special Libraries and Information Centers," (pp. 65-69) discusses needs from the viewpoint of the scientist-user.


The nature and methodology of library surveys are discussed in terms of the surveys' purposes and uses; planning, including experimental design, sampling, and political and economic aspects; collection of information; processing and analysis of survey data; interpretation and presentation. A general bibliography, chapter bibliographies, and a list of important surveys are included. Index.
35. Penner, C.V. *The Planning of Library and Documentation Services*. 2nd ed., rev. and enl. by Herman Liebarts. UNESCO, Paris: UNESCO, 1970. 158 pp. This book concentrates on library and information services in developed countries, with special emphasis on less developed countries. It covers the contribution of library services to planning, library planning considerations, and strategies. Appendices consist of development in some developing and industrialized countries, including Kathleen Moloney, "Planning Library Services in the United States of America." (pp. 81-87).

36. Richardson, Stephen A., and David Klein. *Interviewing: Its Functions*. New York: Basic Books, 1965. 300 pp. The authors deal with interviewing process as a research instrument and information through the following topics: the interview answer process; respondent participation; the question-answer process; antecedent relationship; the question-encouragement, silence, and interruptions; content of questions; achieving responses. The selected personality characteristics of social science field workers are provided by Stephen A. Richards. An appendix provides "A Study of Social Science Field Workers," selected personality characteristics of social science field workers, an index.


The information center is defined as "a unit organization to supply information or substantive responses to users by making use of primary media, secondary media, and in some instances the originator of information, in order to supply appropriate responses." Several models of information systems are considered in relation to fundamental strategies for evolving an information center, and in relation to procedures and aspects of the actual planning.


The author describes user studies conducted by the Clearinghouse for Federal Scientific and Technical Information (CFSTI) to develop information for system design and modification. Various approaches ranging from the interview where the user is asked to choose among alternatives, to controlled experiments where the user's behavior is observed. Formulation of hypotheses for studies is considered.


This bibliography contains 66 briefly annotated references in four sections: general introduction; probability; statistics; methods and techniques. Items have been selected from academic disciplines having sophisticated research methodology which may be applicable to library research problems.


This paper describes a research project to design an information system for physicians and other medical personnel in an outpatient clinic. Theoretical aspects of decisions and information needs are explained, followed by results of observational studies in the clinic and subsequently revised methodology for redesigning the information system.
Planning for the future requires information about current conditions and some methodological framework for making useful projections from the current situation. In the recent past a number of generally accepted techniques have been developed in the social sciences. Each individual study is unique to a given situation, but the broad principles are generally followed. The studies are usually conducted by a researcher expert in the social sciences. The results are then provided to the policy maker in charge.

Any attempt at predicting the future is to some extent fortune telling. Predicting the future on the basis of sophisticated analyses is better than the use of tea leaves, but in many cases it proves to be only minimally better. The problem with any forecast is that unforeseen events and conditions can drastically affect the forecast. We proceed on the assumption, however, that the reliability of the data collected and the wisdom with which it is used determine the validity of the forecast.

A forecast generally begins with an accurate and comprehensive study of the present conditions, facilities, and services. Demographic variables relevant to library services are surveyed and assessed. Demographic information of all types is available through the use of the census data, which are so comprehensive that many accurate projections can be made from them. For example, the projected distribution 5 years hence of all but pre-school children can be accurately estimated by determining the age distribution of today's population. The number of children 5 years old in 1970 is an accurate estimate of children 10 years old in 1975. The reliability of demographic variables makes an examination of these factors a reasonable starting point for a study of library needs in the late 1970's.

The demographic data, while extremely useful, are not sufficient to provide needed projections for determining library service.

To study the future needs for library service, the service itself must be defined in a meaningful way. In many cases this corresponds to the assessment of goals for the particular library. When a group of libraries are studied they must be categorized according to type of service, e.g. elementary school, public-adult, special, etc. A reasonable procedure might be to categorize libraries into classes and then to determine the objectives of that type of library. An inventory of specific library services can then be made. The objectives plus the inventory forms a basis for defining library service. An operational definition of service is a necessary precondition to projecting needs for that service.

Having established what library services to study, we must then question: library service for whom? The population identified as users or potential users of library service should then be broken down into the smallest subpopulations for which individual needs and priorities are to be established. Such specific identification of sub-groups will focus the study, providing a necessary precondition to making meaningful projections.
from existing data. No set rules exist for establishment of meaningful categories of library users. The groups are not mutually exclusive. For example, if the researcher divides the clientele of public libraries into urban, rural, rich and poor, an individual can fall into more than one category. Similarly, different types of libraries may overlap in the groups they serve. The breakdown of the user population is a subjective judgment of the researcher and may be construed as a policy statement about priorities of who is to be served. A choice to identify a given category represents an implicit decision to consider special services for the group so identified. An unavoidable bias in collection and interpretation of the data is also implied. For example, if we categorize the user population by sex we then implicitly gather data which will assist in determining whether special services are required for men or women. If such categorization is ignored, we imply no special services are needed.

Once the researcher has broken down the user population into its constituent subgroups, he must determine which variables are closely related to library service to draw meaningful conclusions and to provide accurate projections. Active experimentation, analysis of existing data, or research into previous studies identifying these variables will help the researcher focus his study on the most pertinent elements. For example, age and educational levels are widely acknowledged significant variables related to public library use; the younger and the more educated one is, the more likely he is to use the library. Thus, the demographic data and projections based on this data regarding age and educational level will be significant parameters in determining future library needs, i.e. if it can be determined that school libraries provide service to people between the ages of five and eighteen, the overall population growth in this group is significant in projecting needs.

Once the researcher has defined the library services to be provided, determined the clientele to be served, and has assembled the required data, he then organizes all the information in a meaningful way. The researcher may construct detailed statistical analyses of the data or he may simply present the data in tables. Ideally, the researcher presents the summarized data to the individual responsible for the decision making. The decision maker or policy maker evaluates the data and draws conclusions from it; it is the researcher or planner who makes the decision. The researcher summarizes his data, then draws conclusions from it. The policy maker is too busy to go through a thorough and detailed evaluation of the data and thus accepts the researcher's recommendations. This effectively separates the decision making from the responsibility for the decisions.

The techniques for forecasting future needs for library services came largely from the areas of business, economics, and city planning. Forecasting of library services are complicated by factors which make it more difficult than economic forecasting. One problem in gathering data which every planner involved in providing public services must face puts the expert against the people being served: who is better qualified to assess future needs and innovations in public service? The expert is often a long term employee of the library being studied and often has wide experience with innovative library services. His sensitivity to the patron
he serves provides a useful source of information for the system designer. In short, the expert has a broader vision than the user. But the user provides important information for the researcher on his existing needs, which must be sensitively and accurately recorded. The needs of non-users of the library must also be recorded, as might reasons for their non-use of services. The needs of non-users usually can be ascertained only by direct questions. Information from patrons to ascertain their needs is usually obtained by two methods: (a) determining the perceived need by asking the patron to articulate it, and (b) observing user behavior. Questionnaires and interviews do not allow easy assessment of intangibles such as need for information and attitudes toward information in libraries. The way the user perceives needs may bear slight resemblance to his actual need; he may have difficulty in articulation of needs. Similarly direct observation is subject to error: existing services may be used incorrectly or may be ignored because the user is unaware of them.

A survey of library services leading to future projections include observational studies, interviews, and knowledgeable expert opinion, because the librarian and the patron both are intrinsic parts of the system. The problem of the expert opinion versus the users' opinion becomes significant when the opinions sharply conflict. This often happens when public institutions are staffed by people very different from those served. Then great care must be used in integrating the two opinions and the conflict may have to be resolved by a policy decision.

The application of standard methodology for predicting the need for library service is seriously affected by an issue recently raised by Ivan Illich,* who divides institutions into two types: coercive and non-coercive. A coercive institution forces the patrons, or users, in some way, to use the service. His prime example is the school system, for by law children are forced to attend. A non-coercive institution has totally voluntary use. Many, if not most, libraries fall into this latter category. Predicting the needs of the nation for schooling is somewhat easier than predicting the needs for library service. Given the demographic data one can be relatively certain of the number of children attending school at any given time. Library service, however, is not so easily predicted because patrons are free to choose whether they will use the library's services or not. Under certain circumstances library services are coercive, as when a school instructor assigns reserved reading material in the library. It follows, then, that predicting the demand for school library service will be easier than predicting the demand for public library service.

The library's intangible benefits to the society it serves need to be considered as a related factor when examining library needs. Some might argue that many non-coercive institutions such as libraries, museums and churches are not needed because the individual would not face any economic hardship if the services were withdrawn. That argument fails to consider the intangible benefits a community enjoys because of an extensive library system. In a sense the library serves both users and non-users in this aspect. Very little sophisticated analysis has been done to measure the

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value of social institutions to the broader society. Yet one suspects that the intangible values will be the ones to determine resources allocated to library service, particularly public library service.

When a new service or innovation is contemplated, the planner faces the difficult problem of determining the market for that new service. In terms of the library, the problem focuses on determining what the results of demand will be if library services are expanded. The planner would like to have some idea of how great the demand is and how much use will be made of a new service before it is actually implemented. Estimates have often proved to be inadequate. The single most significant variable in the acceptance of a new service is the introduction of the service itself. The researcher is then faced with the problem of developing the service before being able to assess the use or the demand for it. The planner could introduce pilot services to gain a realistic estimate of demand and then disseminate the results to similar communities. The scientific method of comprehensive planning before the introduction of an innovation should give way to a methodology which relies on reiteration or trial and error method. The development of new library services by trial and error requires that the service be initiated, evaluated and then changed in response to the evaluation. The process is repeated until the service provided is appropriate for the actual demand.

The above discussion indicates that even a thorough inventory of existing library services and the people served, and a compilation of existing demographic data are not alone sufficient to provide accurate predictions of future library needs. Many factors can combine to thwart the most sophisticated study. Since demand for services often follows the provision of services, it can be virtually impossible to predict demand on the basis of existing needs. In spite of the difficulty, data from the past are all we have and we must use them wisely. The adequacy of library services ultimately depends upon a benevolent attitude on the part of the decision maker. The difficulty in developing accurate projections can be interpreted as an indication of a need for wise, benevolent leadership on the part of the policy maker, or as weakness in the library system. The attitude of the researcher and the policy maker are the most significant variables in any study.
REFERENCES

PLANNING METHODOLOGY: AN ANNOTATED BIBLIOGRAPHY

by

Gilda Perelman


The author describes and analyzes several experimental studies in connection with research methods of experimental design, as applied to community problems. Included is the projected experimental design of "before" and "after" studies that operate from the present to the future. Chapter I, "Natural Social Experiments by Trial and Error" includes a section on planning and prediction. Cross-sectional and ex post facto experimental designs, sociometric scales for control and measurement of effects, and fundamental problems and limitations to study by experimental design are other topics covered. Authors' and subject indexes.


The author presents a multidisciplinary approach for solving social problems by applying scientific methods and humanitarian thought in planning change. Section II covers methodology for the planning, action, evaluation, and dissemination phases in social experiments. In particular, the planning phase encompasses choosing the problem, defining social subsystems and population concepts and procedures of measurement, and methods to study social relationships and processes. Bibliography of references and index.


This book studies social planning within American society, encompassing within the planning task facts, projections, inventories, values, and preferences. Formulation of policy and other dimensions of policy, including types and levels of intervention, and programming, are covered. Organization for planning, evaluation, and feedback are considered in terms of staffing, current structures, and emerging principles. Other sections describe programming considerations, program budgeting and cost effectiveness, problems in social service delivery, and the framework in perspective. Index.


Chapter I, "Change and Continuity," considers methods of making standard projections and determining multifold trends, analysis of long-term trends, and perspectives on historical change. Chapter II deals with "surprise-free" economic projections (worldwide and U.S.),
including tables depicting forecasts and projections. Chapter X, "Policy Research and Social Change," covers ways to go wrong in predicting and objectives of future-oriented policy research. Other chapters deal with science and technology, the international system and politics, and post-industrial society. Name and subject indexes.


Three main aspects of the total transportation planning process are emphasized in this report: inventorying existing conditions, estimating future urban area growth, and determining future travel demand. Various principles and techniques within the process include population inventory and forecast, present and future economic activity, present and planned services in transportation. An annotated bibliography categorizes approximately 200 works related to traffic estimation and assignment, including several on economic analysis and population forecasts.


This handbook is "a compilation of resources organized to provide reference to the essential materials needed in the design of research" (preface). Part I, "General description of the guides to research design and sampling," covers basic considerations in formulating and designing research problems. Part II covers guides to methods and techniques of data collection in library, field, and laboratory, with discussion of social science data libraries and Research centers. Part III reviews statistical analysis; Part IV outlines selected sociometric scales and indexes, in sections according to types of variables studied; Section V discusses research funding, costing, and reporting. Selected bibliographies on research design, methods guides, statistical guides, and fellowships and grants are included. Index of proper names.


The essays in this volume cover various aspects of economic forecasting: formation; accuracy; recorded expectational or forecasting data; sub-
stantive and methodological inquiry. Chapter One, "The Evaluation of Economic Forecasts," by Jacob Mincer and Victor Zarnowitz, discusses absolute and relative accuracy analyses, and forecasts as extrapolations. Chapter Two, "Data Errors and Forecasting Accuracy," by Rosanne Cole, focuses on effects of data errors on accuracy of naive projections, business forecasts, and analytical models of consumption. Jacob Mincer in Chapter Three, "Models of Adaptive Forecasting," includes various methods of formation of expectations in absence of anticipations data. F. Thomas Juster in Chapter Five, "Consumer Anticipations and Models of Durable Goods Demand," encompasses time-series demand models and consumer anticipations, sampling and measurement errors, and other methods which might be extended to apply to demand for library services. Index.


This text is designed for those interested in a practical orientation to methods in educational research and in application and interpretation of research findings. Part I covers science and the scientific method. Part II, "Research Techniques," includes research in the library, statistical considerations, and sampling. Part III, "Research Methods," includes historical research and its applications (pp. 202-230); the survey-descriptive studies (pp. 231-276) and analytical studies (pp. 279-324); experimental method (pp. 325-365); predictive methods (pp. 364-385); review and evaluation of educational research (pp. 386-428); and significant research studies (pp. 429-476). Bibliographies of selected references appear at the end of each chapter. Index.


The authors deal with collection of data and information through the interviewing process in terms of the following topics: the interview as a research instrument; respondent participation; the question-answer process; characteristics of interviewers and respondents. Sub-topics under the question-answer process include criteria for good responses; openness versus closedness, antecedents, and question-antecedent relationships; expectations and premises (leading questions); encouragements, silences, giggles, and interruptions; content of questions; achieving response quality. An appendix provides "A Study of Selected Personality Characteristics of Social Science Field Workers," by Stephen A. Richardson. Bibliography and index.


This bibliography contains 66 briefly annotated references in four sections: general introduction; probability; statistics; methods and techniques. Items have been selected from academic disciplines having sophisticated research methodology which may be applicable to library research problems.

Young's introductory essay considers the demand for forecasting, development of skills, value to the social sciences, and possibilities for research. Other essays cover specific applications of forecasting, methodologies and needs: Mark Abrams, "Consumption in the Year 2000"; Fred E. Emery, "Concepts, Methods and Anticipations"; Christopher Foster, "Future, Research Needs of Transport Planners"; David Grove, "Physical Planning and Social Change"; Peter Hall, "Land Use—the Spread of Towns into the Country"; Bertrand de Jouvenel, "Notes on Special Forecasting"; Tony Lynes, "Social Security Research"; and R.W. Orson, "Forecasting in the Electricity Supply Industry". Some essays include bibliographies.


Defining sociology as both a humanistic and a scientific discipline, the author considers conceptions, propositions, ordering and confirmation of propositions, decisions in verification studies, and confirmation of complex theories. Some subtopics include inventory of determinants; inventory of results; reliability, scope, representativeness and designs (under decisions in verificational studies). Methods and considerations introduced herein, although specifically relevant to sociology, may be extended to library research.