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ABSTRACT

A content analysis of the "Directory of Library & Information Professionals" was performed to obtain information on people holding the Master of Library Science degree. Two thousand samples were taken and classified by gender, state where employed, job category (public service, technical service, collection management, information science, education, and administration), and whether holding a second Master's or Ph.D. It was found that 69.7% of the library professionals listed held only an MLS degree, 20.4% held an MLS and a second master's, and 9.9% held an MLS and a Ph.D. Of those sampled, 31.4% were men, 68.6% women; and 37.5% were employed in public services and 31.2% in administration. California, New York, Illinois, and Washington, D.C., were found to be among the places of high employment for MLS holders. Survey data are displayed in 13 tables and copies of the coding sheets used in analyzing the data are appended. (Contains 24 references.) (Author/BBM)

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A CONTENT ANALYSIS OF MLS HOLDERS FROM  
THE DIRECTORY OF LIBRARY & INFORMATION PROFESSIONALS

ED 376 841

A Master's Research Paper submitted to the  
Kent State University School of Library Science  
in partial fulfillment of the requirements for the degree  
Master of Library Science

by

Timothy C. Goodwin

May 1994

IR 055315

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### Abstract

A content analysis of the Directory of Library & Information Professionals was performed concerning people holding the Master of Library Science degree. Two thousand samples were taken and classified by gender, state where employed, job category (public service, technical service, collection management, information science, education, and administration), and whether holding a second master's or Ph.D. It was found that 69.7% of the library professionals listed held only an MLS degree, 20.4% held an MLS and a second master's, and 9.9% held an MLS and a Ph.D. Of those sampled, 31.4% were men, 68.6% women; 37.5% were employed in public services and 31.2% in administration. California, New York, Illinois, and Washington, D.C. were found to be among the places of high employment for MLS holders.

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## CHAPTER I. INTRODUCTION

One of the current issues in the profession of librarianship has been the debate over the validity of the Master of Library Science degree. Those who have defended the degree have at the same time called for changes in library education, and progress is slowly moving in that direction. In this regard the message coming from the literature of the field has been the need for librarians to further their education and to continue their efforts to make themselves more valuable in the information universe. Edward G. Holley, in an article on defining the academic librarian, urges librarians to acquire as much training as they can, in order to compete successfully in what is becoming a more sophisticated academic environment.<sup>1</sup> Another defender of the MLS, Keith M. Cottam, has also stressed a need for educational improvement.<sup>2</sup>

It seems to follow that acquiring more training and education has led to the issue of multiple graduate degrees. Jean-Pierre V. M. Herubel, while acknowledging the costs of pursuing a second master's (or a doctorate) in terms of both

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<sup>1</sup>Edward G. Holley, "Defining the Academic Librarian," College & Research Libraries 46, no. 6 (November 1985): 467.

<sup>2</sup>Keith M. Cottam, "The MLS: For the Public Good or for Our Good," Library Journal 111, no. 3 (15 February 1986): 114.

time and money, believes that a person is forever affected (positively, it is hoped) by a period of structured intellectual effort in a subject.<sup>3</sup> It has been noted by William G. Jones that librarians are not part of the scholarly research process, and for librarians to hold another advanced degree "would strengthen the credibility of the librarian within the scholarly community."<sup>4</sup> Jones also mentioned that a second advanced degree would lead to faculty status, along with other advantages, in an academic setting.

One of the longstanding controversies concerning multiple degrees in librarianship involves law librarians. Barbara B. Bonney has tried to present both sides of the debate, and the final consensus seems to be that a law librarian has a better chance for status, clout in receiving funds, and equality with faculty when possessing a law degree.<sup>5</sup> This is over and above the opinion that a law librarian could do well enough only by taking a few brief courses of intense study.

In any case, it is a developing trend that more holders of the MLS are also earning other advanced degrees and also that employers are advertising for librarians with these extra

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<sup>3</sup>Jean-Pierre V. M. Herubel, "To 'degree' or not to 'degree': Academic Librarians and Subject Expertise," College & Research Libraries News 52, no. 7 (July/August 1991): 437.

<sup>4</sup>William G. Jones, "The Education of Academic Librarians: How Many Degrees Are Enough," College & Research Libraries News 52, no. 9 (October 1991): 585.

<sup>5</sup>Barbara B. Bonney, "The Controversy Over Dual Degrees for Law Librarians," Legal Reference Services Quarterly 11, no. 1-2 (1991): 132.



credentials. By studying this trend in various ways, progress may be noted and worthwhile predictions made for the future.

#### Purpose of the Study

In view of some of the work that has been done concerning librarians with multiple graduate degrees, which will be discussed in the forthcoming literature review, the purpose of this study is to learn what types of jobs these multiple degree holders are performing and how these findings compare with those holding only the MLS (or equivalent) as an advanced degree. Attention will also be given to gender of the individuals and location of employment (by state). From this point it is then hoped that existing trends will be observed and/or that other useful information will be obtained.

#### Definition of Terms

Multiple graduate degrees is to be defined as a graduate degree in library science and one or more other graduate degrees, whether on the master's or doctorate level, and including subject degrees and other advanced library science degrees.

MLS or equivalent- examples of equivalency to the MLS degree for the purpose of this study are: Master of Library and Information Science, Master of Arts in Librarianship, Master of Science in Library Science, Master of Arts in Library Science-School Libraries, Master of Library Science-Art Librarianship, Master of Education in Library Science and

Instructional Media, and Master of Library Science-Reference and Automation.

Place- is defined as any one of the fifty states of the United States or Washington, D.C., which is included in this study as a point of statistical comparison.

## CHAPTER II. LITERATURE REVIEW

One of the areas in the literature concerned with multiple graduate degrees for librarians is in the development of models. A career stages model for academic librarians was developed by Leslie M. Kong and R. A. H. Goodfellow.<sup>6</sup> A discussion of much of the model is beyond the scope of this study, but subject specialization (as in the attainment of a second master's) is shown to be a vital part of required competencies in career development. Support for additional education is also fostered in an article by Dorothy Cieslicki, who has developed a status model for academic librarians.<sup>7</sup> She points to professional development and the gaining of faculty status as the rationale for further graduate work.

Richard C. Pearson and T. D. Webb formulated a study to measure the academic and occupational preparation of librarians entering the profession.<sup>8</sup> They found that 19% of

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<sup>6</sup>Leslie M. Kong and R. A. H. Goodfellow, "Charting a Career Path in the Information Professions," College & Research Libraries 49, no. 3 (May 1988): 207-216.

<sup>7</sup>Dorothy H. Cieslicki, "A New Status Model for Academic Librarians," Journal of Academic Librarianship 8, no. 2 (May 1982): 77.

<sup>8</sup>Richard C. Pearson and T. D. Webb, "The New Librarians: How Prepared Are They," Library Journal 113, no. 14 (1 September 1988): 133.

the degrees held by their respondents were graduate degrees in a subject specialty.

Sheila Creth and Faith Harders conducted a study to clarify the requirements (aside from the MLS) that academic research libraries have for beginning librarians.<sup>9</sup> They surveyed members of the ACRL Discussion Group of Personnel Officers. They concluded that there is a growing trend to use the second degree as a screening device in review of applications. Thus those with an advanced subject degree are more competitive in the library job market.

Jeanie M. Welch and Linda Dugger touched on multiple graduate degrees in librarianship when they established guidelines for salary determination in academic libraries.<sup>10</sup> In determining individual qualifications, completed postgraduate studies (other than the MLS) was one of the factors which was assigned a component value in the salary formula that had been developed.

Work on Ph.D.s as subject degrees has not been totally neglected. Rush G. Miller performed a study on the influx of Ph.D.s into librarianship.<sup>11</sup> He reported that in the years

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<sup>9</sup>Sheila Creth and Faith Harders, "Requirements for the Entry Level Librarian," Library Journal 105 (October 1980): 2168-2169.

<sup>10</sup>Jeanie M. Welch and Linda Dugger, "Suggested Guidelines for Salary Determination in an Academic Library," Journal of Academic Librarianship 14, no. 6 (January 1989): 368.

<sup>11</sup>Rush G. Miller, "The Influx of Ph.D.s into Librarianship: Intrusion or Transfusion," College & Research Libraries 37 (March 1976): 158-165.

from 1930 to 1960 subject Ph.D.s were considered the most appropriate terminal degrees in librarianship. Since 1960, however, the emphasis for a terminal degree had changed to the Ph.D. in library science. Miller's main concern was to discover the reasons for more subject Ph.D.s coming back into the field in recent years. He received survey results from seventy-two university libraries and forty-four library schools. Pertaining to this study he found that the largest number of subject Ph.D.s were employed in archives, special collections, administration, and subject bibliography.

A definite relationship between MLS holders and subject graduate degrees was found by Terrence Mech as the result of a study of small college library directors of the Midwest.<sup>12</sup> Mech examined, among other things, the education of small college library directors in the Midwest and compared them to other library directors and librarians. His findings indicated that almost half of the directors held graduate degrees other than the MLS. Subject masters were held by 36%. He also mentioned an earlier study in which 41% of the directors held subject masters and 19% held doctorates. He further reported that among ARL directors 44.7% held subject masters and 41% held doctorates. Mech concluded that holding other graduate degrees in addition to the MLS is an almost universal requirement.

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<sup>12</sup>Terrence Mech, "Small College Library Directors of the Midwest," Journal of Academic Librarianship 11, no. 1 (March 1985): 9.

Added support for librarians with multiple graduate degrees can be obtained from a study by Betty-Carol Sellen and Susan J. Vaughn.<sup>13</sup> In studying the salaries and placement of librarians who work in places other than libraries, many respondents of this survey felt an MBA and/or training in computer science were necessary. Of course, the high response of this feeling could be attributed to the fact that these people were working in non-library environments.

Yet more information on multiple degrees came as an offshoot of something else being studied when Jeanie M. Welch researched a comparison of reference jobs in public and academic libraries.<sup>14</sup> Welch sent questionnaires to 166 Texas libraries. Of those, 121 were returned, and 113 were judged as meeting the study's criteria. Less than 3% of public libraries required or preferred a second master's, while 35% of the academic libraries did. Subject specialization was required by 57.1% of the academic libraries and by 43.9% of the public libraries.

Mary Baier Wells did work in what has since become an often cited study of requirements and benefits for librarians

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<sup>13</sup>Betty-Carol Sellen and Susan J. Vaughn, "Librarians in Alternative Work Places," Library Journal 110, no. 3 (15 February 1985): 110.

<sup>14</sup>Jeanie M. Welch, "Are All Reference Jobs Created Equal? A Comparison of Public and Academic Libraries," RQ 27, no. 3 (Spring 1988): 396-401.

in the span of 1959-1979.<sup>15</sup> Part of the purpose of her study was to ascertain if the requirements for academic librarians had changed, and, if so, to identify the changes. A study was made of job advertisements in Library Journal, ALA Bulletin, American Libraries, and College and Research Libraries/College and Research Libraries News. The years 1959, 1964, 1969, 1974, and 1979 were chosen to represent the time span. The subject master's degree requirement was part of the education requirement of Wells' study. She also looked at whether the job advertisement specified a specific subject. In 1959 no advertisement required an advanced degree in a specific subject, and only one of 185 required a subject master's at all. By 1979 twenty-nine of 210 (11.6%) required an advanced degree on any subject and 40 (16.0%) on a specific subject.

Another study that has received frequent mention was done by John N. Olsgaard and Jane Kinch Olsgaard.<sup>16</sup> They were looking for possible trends in educational requirements for academic librarians from job listings through the 1970s. Job listings were looked at from Library Journal and College & Research Libraries News. A portion of the findings of their study was that for university non-directors in the period of 1970-1973, 20.5% were required to have a second master's, and

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<sup>15</sup>Mary Baier Wells, "Requirements and Benefits for Academic Librarians: 1959-1979," College & Research Libraries 43, no. 6 (November 1982): 450-458.

<sup>16</sup>John N. Olsgaard and Jane Kinch Olsgaard, "Post-MLS Educational Requirements for Academic Librarians," College & Research Libraries 52 (May 1981): 224-228.

by 1977-1979 30.8% were required to do so. For college non-directors, 16.1% needed a second master's in 1970-1973 and 19.4% in 1977-1979. University director positions required a second master's 9.1% of the time for 1970-1973 and 12.7% of the time for 1977-1979. College directors needed a second master's in only 4.8% of the cases during 1970-1973 but in 33.0% for 1977-1979. The researchers concluded that university requirements were higher than those at the college level and that educational requirements for directors were higher than for non-director positions.

Surveying the years 1980-1984 Joyce C. Wright performed a study on job opportunities for academic and public librarians.<sup>17</sup> She looked at job advertisements in American Libraries, College and Research Libraries, and Library Journal and found 6,725 listings that met the criteria for the study, of which 32.8% were for public library positions and 67.2% were for academic. As was to be expected, a required subject degree was needed more frequently for academic libraries than for public. Overall the second master's was required for 18.1% of the positions.

David W. Reser and Anita P. Schuneman performed a content analysis comparing public and technical services.<sup>18</sup> They

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<sup>17</sup>Joyce C. Wright, "Job Opportunities for Academic and Public Librarians: 1980-1984," Journal of Library Administration 9, no. 2 (1988): 45-58.

<sup>18</sup>David W. Reser and Anita P. Schuneman, "The Academic Library Job Market: A Content Analysis Comparing Public and Technical Services," College & Research Libraries 53, no. 1 (January 1992):



studied jobs advertised in American Libraries, College & Research Libraries News, Library Journal, and Chronicle of Higher Education for 1988. They analyzed 1,133 positions, almost half of which were for reference librarians. The next largest category, at 22.8%, was cataloging. The study found that advanced degrees were required five times more often for public services than technical services. This was not thought to be surprising considering the need for subject specialization in many reference positions.

Kathleen E. Aufderhaar studied educational requirements in addition to the MLS for academic librarians.<sup>19</sup> She looked at 865 job advertisements in American Libraries for 1990 and found that 143 listings (16.5%) desired or preferred a second master's or Ph.D., and 32 (3.7%) required one of them. An advanced degree required, but of unspecified type, was listed in seven advertisements (0.8%), and 65 (7.5%) listed an additional advanced degree as desired or preferred. Overall some sort of advanced degree (besides the MLS) was required or preferred in 231 of 865 advertisements (26.7%). Aufderhaar's findings also showed that specialized libraries filled job openings with people holding subject specialized degrees 70.6% of the time and that general libraries accomplished this in 56.0% of their cases.

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49-59.

<sup>19</sup>Kathleen E. Aufderhaar, "Educational Requirements Beyond the MLS for Academic Librarians in 1990" (MLS research, Kent State University, 1991), 1-20.

### CHAPTER III. METHODOLOGY

This study is to be accomplished by a content analysis of the Directory of Library & Information Professionals. This directory, which was published in 1988, is the most recent edition available at the time of this study. Frequency distributions and percentages will be computed for analysis.

It was determined that 2000 entries would constitute a sufficient statistical sampling (from 43,000 total entries) of the DLIP. This required that every twenty-first entry be taken in order for the entire directory to be studied and for all entries to have the same chance of being included. Not all entries were suitable for inclusion. Reasons for this were: (1) for some entries no educational information was given, (2) the person did not hold an MLS degree (or equivalent), (3) the person was listed as retired, unemployed, or with no current job listing, or (4) the address for place of employment was outside the United States. When any of these cases occurred, the next suitable entry was taken, with the counting continuing from the original entry. The data was entered onto a coding sheet (see Appendix), which accounted for gender, location of job (by state), job category (public service, technical service, collection management, information science, education, or administration), and the holding or

lack of any graduate degrees in addition to the MLS.

#### Limitations of the Study

As this is a content analysis of the DLIP, the samples are taken from nearly 43,000 individuals. To merit inclusion in DLIP one had to: (1) work or participate in the information field, or (2) work with information systems having information relevant to a variety of users, or (3) work in education or training or library work fields, or (4) have membership or participate in the information field through professional associations or societies.<sup>20</sup> While these are excellent criteria for inclusion, it is hoped that the field available for sampling has not been limited adversely. It should also be noted that nearly 37,000 people who warranted inclusion in DLIP did not respond to the questionnaires sent from the master mailing list. Thus, the sampling can only be from those who responded and provided sufficient information.

The studies previously done concerning MLS degree holders and other advanced degrees were primarily for public, university, and college libraries. The statistics of this study include places of employment such as special libraries, museums, government posts, elementary and secondary schools, and private businesses as well as public libraries and institutions of higher learning. While broad in scope, it is

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<sup>20</sup>Ann J. Shenassa, ed., Directory of Library & Information Professionals (Lake Bluff, Illinois: Research Publications, 1988), v.

hope that this will serve as an indication of the many areas of the work force to which MLS holders may contribute.

## CHAPTER IV. RESULTS

Of the 2,000 entries taken from the DLIP indicating subjects, holding at least an MLS degree, 628 (31.4%) were men, and 1,372 (68.6%) were women. The general distribution of degree holders by gender is shown in table 1.

Table 1  
Distribution of MLS Holders by Gender and Other Advanced Degrees

Degrees	Male		Female		Total	
	f	%	f	%	f	%
MLS only	343	54.6	1050	76.5	1393	69.7
MLS & 2d M.	173	27.6	236	17.2	409	20.4
MLS & Ph.D.	112	17.8	86	6.3	198	9.9
Total	628	100.0	1372	100.0	2000	100.0

The women show a higher percentage in the category of those holding only the MLS, 1,050 at 76.5%, while for the men the figure is 343 at 54.6%. The men have a higher percentage holding the MLS and a second master's with 173 at 27.6%. There are 236 women at 17.2% in this group. MLS holders with a

Ph.D. number 112 at 17.8% for the men and 86 at 6.3% for the women. For the genders combined, 69.7% hold only the MLS, 20.4% hold the MLS and a second master's, and 9.9% hold the MLS and a Ph.D.

The general distribution by gender for the job categories is given in table 2. As is expected, public service and administration are the largest categories for both genders.

Table 2  
Distribution of Job Categories by Gender'

Jobs	Male		Female		Total	
	f	%	f	%	f	%
Pub. Serv.	192	30.6	557	40.6	749	37.5
Tech. Serv.	60	9.6	168	12.2	228	11.4
Coll. Mgmt.	40	6.3	58	4.2	98	4.9
Inf. Sci.	50	8.0	116	8.5	166	8.3
Educ.	44	7.0	91	6.7	135	6.7
Admin.	242	38.5	382	27.8	624	31.2
Total	628	100.0	1372	100.0	2000	100.0

Table 2 shows that, for the men, administration is the most heavily occupied job category. With 242 at 38.5%, it easily surpasses even public service. Public service is second with 192 (30.6%). The other four categories combined total only 194 (30.9%). For the women, public service is the largest category, with 557 (40.6%). Administration is second

with 382 (27.8%). In comparing the two genders it can be seen that the percentage of men in administrative jobs is much higher than for women. In actual numbers, even though there are 744 more women than men in this study, there are only 140 more women in administrative jobs.

While the third highest job category for both groups is technical service, it is more significant for the women (168 at 12.2%) than the men (60 at 9.6%). Overall, only 228 MLS holders (11.4%) are in technical service.

In the categories of information science and education, the women outnumber the men at about a two to one ratio, but in collection management they outnumber the men only 58 (4.2%) to 40 (6.3%). Although no statistics were kept on people in the DLIP who do not hold an MLS, it was "unofficially observed" that many of the people in collection management had only subject master's or subject Ph.D.s.

Another distribution can be made for each gender with a comparison of degrees to job categories (see tables 3 and 4). For the women table 3 shows that of those with only an MLS degree, 432 (41.1%) are in public service. The next largest category is administrative with 298 (28.4%). The smallest group in this distribution is collection management (41 at 3.9%).

The same ranking holds true for women with an MLS and a second master's. Public service is the largest group (104 at 44.1%) followed by administration (51 at 21.5%). Collection

management is tied with the education category for smallest group honors, each having 14 at 6.0%.

Table 3

Distribution of Jobs Held by Women by Degree and Category  
(N=1,372)

Jobs	MLS only		MLS & 2dM		MLS & PhD		Total	
	f	%	f	%	f	%	f	%
PS	432	44.1	104	44.1	21	24.3	557	40.6
TS	128	12.2	35	14.8	5	6.0	168	12.2
CM	41	3.9	14	6.0	3	3.5	58	4.2
IS	96	9.2	18	7.6	2	2.3	116	8.5
Ed	55	5.2	14	6.0	22	25.6	91	6.7
Ad	298	28.4	51	21.5	33	38.3	382	27.8
Tot	1050	100.0	236	100.0	86	100.0	1372	100.0

PS= Public Service, TS= Technical Service, CM= Collection Management, IS= Information Science, Ed= Education, Ad= Administration

Concerning women with an MLS and a Ph.D. degree, the rankings change. Administrative is the largest group with 33 at 38.3%. Education edges out public service for second largest with 22 at 25.6%, public service showing 21 at 24.3%. Information science is the smallest group here, 2 at 2.3%, but technical service and collection management are only slightly ahead. The top three categories are very dominant in this degree grouping.



Looking at the men in the same type of distribution in table 4, it can be seen that administration is the largest category for each of the three degree types. For men holding the MLS only, there are 122 (35.5%) in administrative jobs, followed by public service with 117 (34.1%). For men with the MLS and a second master's, administrative leads with 66 at 38.2% with public service second at 58 (33.6%). In this degree type each of the remaining four categories are closely grouped at 10-15 with 5.9% to 8.8%.

Table 4

Distribution of Jobs Held by Men By Degree and Category  
(N=628)

Jobs	MLS only		MLS & 2dM		MLS & PhD		Total	
	f	%	f	%	f	%	f	%
PS	117	34.1	58	33.6	17	15.2	192	30.6
TS	41	12.0	15	8.8	4	3.6	60	9.6
CM	22	6.4	12	7.0	6	5.4	40	6.3
IS	36	10.5	11	6.5	3	2.7	50	8.0
Ed	5	1.5	10	5.9	29	24.9	44	7.0
Ad	122	35.5	66	38.2	54	48.2	242	38.5
Tot	343	100.0	173	100.0	112	100.0	628	100.0

PS= Public Service, TS= Technical Service, CM= Collection Management, IS= Information Science, Ed= Education, Ad= Administration

Concerning men with a <sup>MS</sup>MLS and a ~~MS~~PH.D., administration

holds a large dominance with 54 at 48.2%. As in this distribution for the women (table 3), 29 (24.9%) hold jobs in education. It should also be noted that, for all degrees held by men in the category of education, the more advanced the degree combination, the more degree holders there are: 5 (1.5%) for MLS only, 10 (5.9%) for MLS and a second master's, and 29 (24.9%) for those with an MLS and a Ph.D. This is the only category showing this type of progression.

Another area looked at in this study deals with places where MLS degree holders are employed. Table 5 shows the ten places with the most MLS holders (with or without other advanced degrees). It also shows each place's population rank as of the census figures from 1980.<sup>21</sup>

Table 5  
Places with Most MLS Holders Employed  
(N=2,000)

Place	f	%	Place	f	%
New York(2)	215	10.8	Michigan(8)	80	4.0
California(1)	205	10.3	New Jersey(9)	79	3.9
Illinois(5)	136	6.8	Ohio(6)	74	3.7
Pennsylvania(4)	98	4.9	Texas(3)	73	3.6
Massachusetts(11)	82	4.1	Maryland(18)	72	3.5

Population rank (1980) in parentheses.

<sup>21</sup>Otto Johnson, ed. The 1988 Information Please Almanac (Boston: Houghton Mifflin, 1987): 774, citing Department of Commerce, Bureau of the Census.

New York, second in population rank, leads this list with 215 MLS holders (10.8%). California, first in population rank, is second with 205 (10.3%). Texas, third in population, is ninth with 73 (3.6%). Although eighteenth in population, Maryland ranks tenth in this table, 72 at 3.5%.

Table 6 shows places with the most people employed who hold an MLS and a second master's.

Table 6  
Places with Most MLS & Second Master's Holders Employed  
(N=409)

Place	f	%	Place	f	%
New York(2)	49	12.0	New Jersey(9)	18	4.4
California(1)	46	11.2	Maryland(18)	14	3.4
Illinois(5)	25	6.1	Massachusetts(11)	14	3.4
Washington,D.C.(47)	21	5.1	North Carolina(10)	11	2.7
Pennsylvania(4)	19	4.6	Ohio (6)	11	2.7
Michigan (8)	18	4.4			

Population rank (1980) in parentheses.

Again, as might be expected, New York and California occupy the top spots; more library and information science professionals work in these states than in any others, and these places have the two highest population ranks. Maryland, ranking eighteenth in population, repeats in this table in the eighth position. Most surprising is Washington, D.C., which ranked forty-seventh in population, but is fourth here with 21

(5.1%).

Table 7 lists places with the most MLS and Ph.D. degree holders employed. Maryland is repeated on this list (8 at 4.0%), but the biggest surprise is the appearance of Connecticut (population rank twenty-fifth) ranked tenth (6 at 3.0%).

Table 7  
Places with Most MLS & Ph.D. Holders Employed  
(N=198)

Place	f	%	Place	f	%
New York(2)	19	9.6	Pennsylvania(4)	9	4.5
California(1)	17	8.6	North Carolina(10)	8	4.0
Illinois(5)	16	8.1	Maryland(18)	7	3.5
Texas(3)	10	5.1	Connecticut(25)	6	3.0
Michigan(8)	9	4.5	Massachusetts(11)	6	3.0
Ohio(6)	9	4.5			

Population rank (1980) in parentheses.

Another type of distribution regarding places and employment concerns job categories. Table 8 shows the places with MLS holders employed in public service. Washington, D.C., with its forty-seventh rank in population again appears, at tenth with 20 degree holders (2.7%).

Table 9 lists the most places with the most MLS degree holders in technical services. Washington, D.C. (because it is not ranked in the top ten of places with most MLS degree

holders employed) and Maryland are the two least expected places to appear on this list.

Table 10 shows the places with the most MLS degree holders employed in collection management. Washington, D.C., with its low population rank, is a surprising second. Maryland appears again, tied for ninth place with Minnesota (twenty-first in population) at 4 (4.1%).

Table 8

Places with Most MLS Holders in Public Service  
(N=749)

Place	f	%	Place	f	%
California(1)	97	13.0	Ohio(6)	31	4.1
New York(2)	84	11.2	Massachusetts(11)	28	3.7
Illinois(5)	53	7.1	New Jersey(9)	25	3.3
Pennsylvania(4)	43	5.7	Texas(3)	23	3.1
Michigan(8)	34	4.5	Washington, D.C.(47)	20	2.7

Population rank (1980) in parentheses.

Table 9  
Places with Most MLS Holders in Technical Service  
(N=228)

Place	f	%	Place	f	%
New York(2)	28	12.3	Texas(3)	9	3.9
California(1)	17	7.5	New Jersey(9)	8	3.5
Maryland(18)	12	5.3	Ohio(6)	8	3.5
Illinois(5)	11	4.8	Pennsylvania(4)	8	3.5
Georgia(13)	10	4.4	Washington,D.C.(47)	8	3.5

Population rank (1980) in parentheses.

Table 10  
Places with Most MLS Holders in Collection Management  
(N=98)

Place	f	%	Place	f	%
California(1)	12	12.2	Pennsylvania(4)	7	7.1
Washington,D.C.(47)	8	8.2	Louisiana(19)	5	5.1
Illinois(5)	7	7.1	Maryland(18)	4	4.1
New York(2)	7	7.1	Minnesota(21)	4	4.1

Population rank (1980) in parentheses.

Table 11 shows the places with the most MLS holders employed in information science. Despite its very low rank in population, Washington, D.C. (with its many professional associations and libraries) is again on this list. Lower ranked Connecticut and Maryland are also on this list.

Table 11

Places with Most MLS Holders in Information Science  
(N=166)

Place	f	%	Place	f	%
California(1)	17	10.2	New Jersey(9)	9	5.4
New York(2)	16	9.6	Connecticut(25)	8	4.8
Maryland(18)	13	7.8	Illinois(5)	8	4.8
Massachusetts(11)	11	6.6	Washington, D.C.(47)	8	4.8
Texas(3)	10	6.0			

Population rank (1980) in parentheses.

A look at states with the most MLS holders employed in education finds New York (15 at 11.1%) at the top. Lower ranked (by population) but appearing in this table are Minnesota and Washington, D.C. (both at 4, 3.0%).

Table 12  
 Places with Most MLS Holders in Education  
 (N=135)

Place	f	%	Place	f	%
New York(2)	15	11.1	Ohio(6)	5	3.7
Illinois(5)	11	8.1	California(1)	4	3.0
Texas(3)	11	8.1	Georgia(13)	4	3.0
New Jersey(9)	8	5.9	Minnesota(21)	4	3.0
Michigan(8)	6	4.4	Washington,D.C.(47)	4	3.0
North Carolina(10)	6	4.4			

Population rank (1980) in parentheses.

Table 13 shows states with the most MLS holders employed in administrative positions. Texas, ranked third in population, is absent from this table, but lower ranked Maryland and Washington, D.C. are included.



Table 13  
 Places with Most MLS Holders in Administration  
 (N=624)

Place	f	%	Place	f	%
New York(2)	65	10.4	Michigan(8)	27	4.3
California(1)	58	9.3	New Jersey(9)	26	4.2
Illinois(5)	46	7.4	Maryland(18)	23	3.7
Pennsylvania(4)	34	5.4	Ohio(6)	23	3.7
Massachusetts(11)	32	5.1	Washington,D.C.(47)	21	3.4

Population rank (1980) in parentheses.

## CHAPTER V. CONCLUSIONS

Women holding a Master of Library Science degree, with or without other advanced degrees, and whose entries were randomly chosen from the DLIP, outnumber the men at a ratio of about two to one. Of the 2,000 people in this study, 69.7% hold a MLS degree and no other advanced degree. Three-fourths of the women are in this category (76.5%) and slightly more than half of the men (54.6%).

When looking at other advanced degrees earned in addition to the MLS, the men hold them at a higher rate, the MLS and a second master's 27.6% for the men to 17.2% for the women, and the MLS and a Ph.D. 17.8% for the men to 6.3% for the women. For both genders combined, about one in five holds a second master's, and one in ten holds a Ph.D.

In terms of job categories, more men (38.5%) are employed in administration, and more women (40.6%) are in public service. For both groups the fewest are in collection management, which could be attributed to the hiring of more people with advanced degrees who do not hold an MLS. Overall, more people holding an MLS are working in public service (37.5%), with administrative posts being the next most frequent (31.2%).

With all degree categories combined, education ranks fifth (135 at 6.7%), but it is second highest for those holding the MLS and a Ph.D. (25.8%). Many of these people are teaching at universities in library and information science programs.

Of the women holding an administrative position, 78.0% have only the MLS degree. Half of the men (50.4%) in this job category have no other graduate degrees in addition to the MLS.

When considering places of employment, the logical assumption is that the most populated states would have the most MLS holders. For the most part this is true; states ranking in the top ten in census figures (California, New York, Texas, Pennsylvania, Illinois, etc.) do appear most frequently in the various distribution tables. A notable exception, however, is Washington, D.C., which was included in the study, because it is the home of the Library of Congress and various other government posts and museums. Although it ranked forty-seventh in population and did not make the top ten in this study for most MLS degrees employed, the nation's capitol does rank in the top ten in several of the tables dealing with employment by place. Maryland, ranked eighteenth in population, Minnesota, ranked twenty-first, and Connecticut, ranked twenty-fifth, also appear in several of these tables.

The profession of librarianship has long been believed to

be a service oriented field; this is substantiated by the statistics for the public service category. However, the high numbers in administrative positions also show librarianship to be a profession of management responsibility and leadership. Work in the other job categories serves both to support these areas and to stand alone in their own right.

When a more current edition of DLIP is published, this study could be replicated. Trends of the past and present must be identified, which will enable more accurate predictions to be made for the future.

## APPENDIX

## Coding Sheet

Abbreviations: ST= state, DG= degree, PB= public service, TS= technical service, CM= collection management, IS= information science, Ed= education, Ad= administration, m= men, w= women, ML= MLS only, 2M= MLS & 2d master's, PH= MLS & PhD

ST	DG	PB	PB	TS	TS	CM	CM	IS	IS	Ed	Ed	Ad	Ad
		m	w	m	w	m	w	m	w	m	w	m	w
AL	ML												
AL	2M												
AL	PH												
AK	ML												
AK	2M												
AK	PH												
AZ	ML												
AZ	2M												
AZ	PH												
AR	ML												
AR	2M												
AR	PH												
CA	ML												
CA	2M												
CA	PH												
CO	ML												
CO	2M												
CO	PH												
CT	ML												

CT	2M													
CT	PH													
DE	ML													
DE	2M													
DE	PH													
DC	ML													
DC	2M													
DC	PH													
FL	ML													
FL	2M													
FL	PH													
GA	ML													
GA	2M													
GA	PH													
HI	ML													
HI	2M													
HI	PH													
ID	ML													
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IL	PH													
IN	ML													
IN	2M													
IN	PH													
IA	ML													
IA	2M													
IA	PH													
KS	ML													

KS	2M																		
KS	PH																		
KY	ML																		
KY	2M																		
KY	PH																		
LA	ML																		
LA	2M																		
LA	PH																		
ME	ML																		
ME	2M																		
ME	PH																		
MD	ML																		
MD	2M																		
MD	PH																		
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MS	ML																		
MS	2M																		
MS	PH																		
MO	ML																		
MO	2M																		
MO	PH																		
MT	ML																		







VA	2M													
VA	PH													
WA	ML													
WA	2M													
WA	PH													
WV	ML													
WV	2M													
WV	PH													
WI	ML													
WI	2M													
WI	PH													
WY	ML													
WY	2M													
WY	PH													

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