In addition to a literature review emphasizing definitions, statistics, and legislation concerning learning disabilities, this paper presents the results of a 1987 survey of academic libraries regarding their services for postsecondary learning disabled students. Responses (n=525) to the questionnaire indicated that, as a group, academic librarians lack sufficient knowledge of learning disabilities and generally do not provide services specifically designed to meet the needs of learning disabled college students. Recommendations for improving services for this population are offered. Analyses of the survey data for specific questions are provided in seven appendices. (16 references) (Author/BBM)
ACADEMIC LIBRARY SERVICES

AND THE

LEARNING DISABLED COLLEGE STUDENT

Julia Gustafson
Reference Librarian
Andrews Library
The College of Wooster
Wooster, Ohio 44691

Kerry Langan
Reference Librarian
Oberlin College Libraries
Oberlin, Ohio 44074

Originally presented as a paper at the continuing education workshop, "Library Services for the Learning Disabled", sponsored by The Western New York Library Resources Council at the Amherst Main Library at Audubon in Buffalo, New York on June 8, 1990.
ABSTRACT

In addition to a literature review emphasizing definitions, statistics, and legislation concerning learning disabilities, the authors present the results of their 1987 study surveying academic libraries regarding their services for post-secondary learning disabled students. As a group, academic librarians lack sufficient knowledge of learning disabilities and generally do not provide services specifically designed to meet the needs of learning disabled college students. The authors make recommendations as to improving services for this population.
INTRODUCTION

As early as 1983 and 1984, Gustafson was confronted with the need for improving library services for learning disabled students at The College of Wooster campus. In the spring of 1986, Langan became aware of a similar need on the Oberlin College campus. The two of us began discussing our concerns and embarked on a joint project in the spring of 1987. As reference librarians, we had contact with students whom we knew were, or we suspected were, learning disabled. Although we discussed and compared experiences in working with learning disabled students, we had no formal training in the field. Thus, educating ourselves was a necessary first step before determining appropriate library services for this population.

At the outset of our research, we searched the ERIC, Library Literature, PsycInfo, and Magazine Index databases. It became evident that there is a wealth of literature on learning disabilities. Although there is a growing body of literature concerned with the postsecondary learning disabled student, it generally addresses study habits, legislation, statistics, student retention, faculty education, advantages of computers and audio-visual materials as learning aids, and many related topics. Although this information was very helpful to our understanding of learning disabilities and the learning disabled college student, we did not find the guidance we were looking for in order to undertake assessing and improving our library services for learning disabled students. Very few articles discussed
library services and the development of library skills as integral to the academic success of the learning disabled college student. While we continued to study the literature and update our online searches, the idea of a survey presented itself. Before discussing the planning of the survey, it is important to note the three areas covered in the literature most relevant to our research.

LITERATURE REVIEW
Definitions

We found that the simplest question is also the most difficult: What is a learning disability? In its Report to the US Congress, the Interagency Committee on Learning Disabilities noted, "the concept of learning disabilities is one that has evolved over time".¹ This statement is borne out by the many varied and conflicting definitions of learning disabilities put forth by such groups including the National Advisory Committee on Handicapped Children², the National Joint Committee for Learning Disabilities³, and the Interagency Committee on Learning Disabilities.⁴ Over the course of several years, these and other groups have discussed whether learning disabilities are a homogeneous condition or a heterogeneous group of disorders, whether to use the word "children" in a definition describing a lifetime condition, how learning disabilities relate to learning problems resulting from visual, hearing, or motor handicaps, emotional disturbance, or socioeconomic or cultural disadvantage and the nature of the relationship between learning disabilities, and finally, attention deficit disorder with or without

²
accompanying hyperactivity. Despite differences in these definitions, however, it is generally agreed that intelligence level is not affected by a learning disability, and that learning disabled people are of average or above average intelligence.\textsuperscript{5}

In 1987, Gerald Coles published \textit{The Learning Mystique: A Critical Look at "Learning Disabilities"} \textsuperscript{6} which disputes not simply all of these definitions, but the existance of learning disabilities at all. Coles controversially maintains that only a small number of those people currently labeled learning disabled are actually suffering from neurological dysfunction. The real causal culprits, he says, are ineffective instruction, problematic family and social backgrounds, and the learning disabilities industry itself.\textsuperscript{7}

Another scholarly study disputing these definitions of learning disabilities is Diane McGuiness’ \textit{When Children Don’t Learn: Understanding the Biology and Psychology of Learning Disabilities}.\textsuperscript{8} McGuiness concentrates on innate sex differences noting that 75\% of dyslexics and 90\% of hyperactives are boys.\textsuperscript{9} The author proposes that we acknowledge that multiple learning styles are simply variations of the standard and that it is dangerous to attempt to impose the same norm on people with differing abilities. Consequently, she designates the label learning disabled as a social invention.\textsuperscript{10}

The debate will no doubt continue. Not being experts in the field, the authors were unable to discern the most accurate definition of a learning disability and, as a default, chose a definition carrying legislative weight to incorporate into the
letter accompanying the survey. The Education for All Handicapped Children Act of 1975 defines a learning disability as:

a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations. The term includes such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. The term does not include children who have learning problems that are primarily the result of visual, hearing, or motor handicaps, of mental retardation, of emotional disturbance, or of environmental, cultural, or economic disadvantage.

LEGISLATION

Beyond the desire to provide the best and most suitable service for learning disabled students, we also were made aware of the legal requirements in meeting the needs of this population. The Rehabilitation Act of 1973 contains the famous "Section 504" which states that, "no otherwise qualified handicapped individual...shall, solely by reason of his handicap be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal assistance." Perhaps owing to the visible nature of physical disabilities, early library literature discussing 504 compliance focused on physical access to library facilities and the rights of the physically disabled. This legislation, however, also protects the rights of the learning disabled. Recent legislation, the Americans with Disabilities Act, which became law on July 26, 1990, will cause further requirements to be explored by college campuses. As more and more learning disabled students voice their rights under existing legislation, higher education will have to respond.
Where the library fits into this response will no doubt vary on campuses. Given the inherent involvement of the library in the academic process, however, libraries should ensure that its services are fully available and suited to serve the needs of this population.

STATISTICS

We also found out how prevalent learning disabilities are. In its March 13, 1989 issue, US News and World Report noted that 1.9 million children have been diagnosed as learning disabled during the last decade, an increase of 140%. The Twelfth Annual Report to Congress on the Implementation of the Education of the Handicapped Act reports that over 99,000 learning disabled persons between the ages of 18 and 21 were served under part B of the Education of the Handicapped Act during the 1987-88 school year in the United States and insular areas. Charles Mangrum II and Stephen S. Strichart discuss the phenomenon of greater numbers of learning disabled students on college campuses in their article, "Problems and Needs of Learning Disabled Students in College." They maintain that this increase is owed to a number of factors including parental and professional support, and federal and state implementation of strong legislation. In addition, monetary difficulties of institutions of higher education as a result of declining student enrollments and escalating operational expenses have caused colleges and universities to view learning disabilities as a new and vital resource. Also, programs for learning disabled students which
normally had a duration of the elementary school years were extended through secondary school years thus providing learning disabled students with additional preparation for college. Whatever the cause, the presence of learning disabled students is growing significantly on American college and university campuses with more than 14% of all freshmen with disabilities reporting a learning disability. The learning disabled population is actually considerably larger since many students do not disclose, or are unaware, of the disability. Many students are first diagnosed during their college years.

PLANNING THE SURVEY

Purpose

At the outset, we considered the survey's purpose to be two-fold: our primary goal was to generate ideas for bettering and furthering library services for learning disabled students on our respective campuses, and our secondary goal, realized while conducting our ongoing literature review, was hopefully to heighten academic librarians' consciousness regarding learning disabilities.

Methodology

We realized, of course, that surveying every academic institution in the country was not feasible. We also realized that many academic librarians would be unfamiliar with the subject of learning disabilities and therefore unable to share
information regarding library services for these students. Because of this, we opted to limit our survey to libraries affiliated with institutions advertising campus programs for learning disabled students. During our planning process, we made use of three relevant directories:


Once we had compiled a listing of institutions advertising such programs, we consulted the then current *American Library Directory*(1987-88)21 and eliminated those schools which did not have a library listed. We also used the Directory to gather names and addresses for our mailing list. Whenever possible, we selected Heads of Reference Departments since the authors are both reference librarians and felt that, owing to its nature and visibility, the reference department would be the most likely to come in contact with learning disabled students. If a Head of Reference was not listed, we chose the Head of Public Services.
Lacking this information, we chose a name affiliated with the most visible department listed. In the case of small academic libraries, this was sometimes the Director.

Our resulting list consisted of 911 libraries. Mailing addresses were entered into a word processing file and two sets of labels were printed for mailing the survey and the follow-up letter. Simultaneously, the authors discussed the types of questions to use in the survey which evolved to include queries regarding knowledge of learning disabilities, number of learning disabled students on campus, nature of communication between the library and the campus office providing support services to learning disabled students, and specific library services offered to these students. The authors also prepared the letter which would accompany the survey. As stated earlier, the letter contained a definition of learning disabilities as defined by The Education for All Handicapped Children Act of 1975. We noted in the letter that research was not required to answer survey questions; rather, we were simply interested in receiving impressions regardless of the degree or lack of experience with learning disabled students. The survey and accompanying letter were mailed in mid-June with a reply requested within two weeks. A follow-up letter was mailed on July 1 to those libraries that had not yet responded. Between mid-June and September of 1987, we received 525 completed surveys, a response rate of 58%.

The quantitative data was entered into a DBASE III file and narrative remarks into a WordPerfect file. Almost immediately after receiving responses, we realized that we had neglected to
identify their institution type as two-year, four-year (college),
university, or other (e.g. seminary library). Fortunately, the
majority of respondents supplied this information of their own
volition. We double-checked directories for those who did not
and were able to verify institution type for all but the few
respondents who completed the survey anonymously.

SURVEY RESULTS AND ANALYSIS

Although we have compiled interesting data, some of it is not
entirely conclusive. Since respondents were asked not to
research the questions, but to respond using information they
already knew or thought they knew, results were analyzed with
this in mind. The survey results did, however, provide an
indication of librarians’ awareness of college students with
learning disabilities.

Question #1: How would you characterize your knowledge of
learning disabilities? (extensive, moderate, minimal)
(See Appendix A)
Of the 525 usable responses, 505 librarians answered question
one. 3%, or 18, of the respondents characterized their knowledge
as extensive; 41%, or 217, characterized their knowledge as
moderate; 51%, or 270, characterized their knowledge as minimal;
and 4% of the respondents chose not to answer the question.
As is evident from the data, over 50% of the respondents claimed
minimal knowledge of learning disabilities underscoring the
importance of doing the survey. Judging from qualitative responses to later narrative survey questions, it is possible to theorize that many respondents reporting moderate, or even extensive knowledge of learning disabilities may have a misconception as to what comprises a learning disability. Many seemed to confuse physically disabled students with learning disabled students. As a result, data must be viewed as an indicator of perceived awareness or knowledge, not as actual fact. (See Appendix B)

At this point, it is interesting to look at a breakdown of responses by institution type. Of the 159 respondents from two-year colleges, 6% (10) claimed extensive knowledge, 50% (80) claimed moderate knowledge, and 40% (63) claimed minimal knowledge; of the 77 respondents from four-year colleges, 1% (1) claimed extensive knowledge, 34% (26) claimed moderate knowledge, and 60% (46) claimed minimal knowledge; and of the 271 respondents from university settings, 3% (7) claimed extensive knowledge, 39% (106) claimed moderate knowledge, and 55% (150) claimed minimal knowledge. One can conclude from these statistics that there are a higher percentage of librarians at two-year college campuses who appear to have either greater knowledge or greater awareness of learning disabilities than librarians at either four-year college or university campuses. This was not surprising since there had appeared to be more literature and studies on learning disabled students at two-year college from the outset. In an article published in New Directions for Community Colleges in spring of 1987, authors Young and Staebler note that community
colleges appeal to learning disabled students because of developmental program offerings in mathematics, reading, written language, and vocabulary. Career counseling, vocational assessment, and occupational programs offered at community colleges are also attractive to the learning disabled student, as are adult education and GED training. Traditional liberal arts courses are generally offered as well, providing preparation for transfer to four-year colleges. This excellent overview by Young and Staebler provided us some concrete reasons why two-year colleges appeared to attract learning disabled students.

Question #2: Do you know the size of the learning disabled student population at your college or university? (yes, no)

(See Appendix C)

It is interesting to note that only 24%, or 128, of the 525 respondents answered yes to this question. Of the 159 respondents at two-year colleges, 29% (46) answered yes; of the 77 respondents at four-year colleges, 25% (19) answered yes; and of the 271 respondents at university campuses, 22% (60) answered yes. These percentages, all relatively close, may underscore the role confidentiality of a learning disability plays. Students may prefer, perhaps with the encouragement of their parents, not to disclose a learning disability. In response, many colleges and universities discretely provide estimates of the learning disabled population rather than

11
specific numbers. In addition, one is always aware that undiagnosed students are present on every campus.

Question #3: What physical services are offered at your institution?

(See Appendix D)

Research done prior to conducting the survey assisted in a list of physical services useful to students with various types of learning disabilities. The intent of the question was to obtain a sense as to where on campus such services were most often available, either in the library or in other campus offices or departments. While undertaking a post-survey literature review, it was gratifying to find an article in the May 1987 issue of Academic Therapy by Robert J. Michael that provided a checklist of services similar to those included in our survey. The survey neglected to include a book retrieval service although a few respondents mentioned this in narrative remarks.

It is interesting to note that 87% of the campuses provided viewing/listening areas, 85% provided computing facilities, and 79% provided typewriters. These are all relatively high percentages for such services. 46%, slightly less than half of the institutions, provided a talking books/taped text book service and 47% provided use of campus-owned calculators. Kurzweil reading machines were provided at only 30%, or 159 of the campuses. Of these institutions, 53 were two-year colleges, 96 were universities, and 10 were four-year colleges; a breakdown
that is not surprising considering the cost of such machines.

Free photocopying, however, appears to be offered at only 17% of the institutions surveyed. It should be noted that some respondents were unsure what services were offered; the percentage of respondents marking this column, however, was relatively low.

Probably one of the most interesting things to note from this question is that there appears to be no strong trend as to where on campus, either in the library or in other campus offices, the services are offered. The response does indicate, however, that a fairly high percentage of campuses offer many of the services the authors believe to be essential to the success of learning disabled students in college. This is a plus for those students who know how to seek out such services, but there are some campuses that could do more in the area of physical services.

In addition to the list of services included in the survey, several respondents noted the provision of the following on their campuses: individual assistance in the form of notetaking, reading, and tutoring; magnifying machines like Visualtek or Apollo Laser Magnifiers; lending of college-owned tape players; special study rooms in the library; and book retrieval services. All such services would be useful offerings to learning disabled students on college campuses.
Question #4:
What research services does your library offer to learning disabled students?

Question #5: What research services does your library offer to your general student body?

(See Appendix E)
The purpose of questions 4 and 5 was to measure the availability of research services that are generally offered at a high percentage of academic libraries, services that the authors believe are especially useful to learning disabled students. In addition, there was interest in learning if some institutions offered specifically designed research services for learning disabled students as opposed to those usually offered to the general student population. The vast number of respondents, however, indicated that research services offered by their institutions were available to all students, including learning disabled students, and that there were not separate or tailored services for this population. As a result, while compiling the data on these two questions, it was assumed that whenever a respondent noted a research service offered to that institution's general student population, it was also available to the learning disabled students at that institution. Therefore, although the resulting data were not compiled as originally envisioned, it did provide a useful indicator of research services that were offered at the respondents' institutions.
The list of research services included individualized reference consultations, fee-based versus free online database searching, bibliographic instruction sessions, self-paced workbooks, computer assisted instruction programs, and a variety of types of orientation tours, both media-based and personal. For every item on our list, except one, there was a slightly higher percentage of these services offered to learning disabled students as compared to the general student population. The difference in the percentages, however, was not significant enough to draw any meaningful conclusions.

When looking at the chart outlining the statistics, you can see the comparisons between research services offered to the general population and those offered to learning disabled students. 87% of the respondents' institutions offered individualized reference consultations to their general student populations versus 92% to learning disabled students. For fee-based online database searching, 53% offered this service to the entire student population with no distinctions. For free online database searching, there was a slight difference with 24% offering it to their general student populations and 26% to the learning disabled students. Bibliographic instruction is offered to the general student body at 83% of the institutions and to learning disabled students at 86%. The statistics continue on in this vein, as you can see by examining Appendix E. Very few institutions claim to offer computer assisted instruction programs, a fact that is not very surprising given the cost and
effort needed to develop such programs.

When looking at the breakdown of the different types of formats of orientation tours offered, it appears that many institutions prefer or choose to offer only one type of orientation option. This might possibly be a detriment to some learning disabled students who do not learn well from the type of medium offered. If, however, the institution offers individualized reference consultations, as many appear to do, then the weakness in orientation offerings may not be a problem.

A few respondents shared some narrative comments on interesting programs offered at their home institutions. One institution holds a three week campus orientation for learning disabled students prior to the academic year, with a substantial portion of the time spent working with professional library staff. Others answered that there were library instruction classes designated for learning disabled students. Many respondents indicated that research services offered to the general population could be geared specifically to learning disabled students upon request. The general sense derived from the responses to questions #4 and #5 is that most of the respondents are willing to do what is needed, but many are not aware of the specific needs of learning disabled students.

Question #6: Are you aware of what office(s) or department(s) on campus offer(s) academic/counseling, etc. services to learning disabled students? (yes, no)
(See Appendix F)
83%, or 434 respondents, reported knowing the campus provider of academic/counseling services to learning disabled students. 17% or 91 respondents, were either unaware, or did not answer the question. A breakdown by type of institution of those who responded yes to this question follows: 89% (142) of the 159 respondents from two-year colleges, 88% (68) of the 77 respondents from four-year colleges, and 78% (212) of the 271 respondents from universities. The statistics reveal that there is a slightly higher percentage of respondents at both two-year and four-year campuses aware of where such services are available than respondents on larger university campuses.

Question #7: What type of formal or informal communication do you maintain with the office(s) or department(s) providing support services to learning disabled students? Please explain with as much detail as possible. (See Appendix G)

While reporting a great variety in the types of communication maintained, 72% of respondents reported existant communication with campus offices providing support services to learning disabled students. An overwhelming number of respondents stated that informal contact worked well. Many of these respondents were from small colleges although the same observation was made occasionally by respondents from large universities. Informal contact might include referral of a student by a staff member in a support office to a librarian or vice versa. Many respondents indicating informal communication noted that one office will call
another co alert staff regarding a student with special needs. Several respondents noted that they shared facilities with support offices and this afforded the opportunity for frequent contact, both formal and informal. Some library staff serve on campus committees concerned with the needs of learning disabled students. Several institutions reported that their developmental learning centers publish newsletters, one even inviting suggestions and comments from all campus offices. Several respondents noted that the support office provided a list of names of learning disabled students and/or all handicapped students registered with the office to library staff. Many institutions reported that the same support office servicing physically disabled students assisted learning disabled students and that library contact was more frequently regarding physical disabilities. Some libraries have designated one staff member to be a liaison with the support office. In some instances, such contact is limited to the library's informing support services of recently received library materials relevant to learning disabilities.

A few institutions who claimed to not have any or much communication with special services offices felt that upon reviewing our survey such communications were important. Also, it is interesting to note that several respondents claimed that the needs of learning disabled students on their campuses had only recently been brought to the forefront, some resulting in newly formed developmental learning centers to address those
needs. On those campuses, the librarians responding to the survey appeared to be willing to address those needs at their end as well.

Question #8: Have you developed any instructional aids specifically for learning disabled students? (yes, no) If so, please describe them. We would appreciate receiving any copies you are able to send.

Only 2%, or 13, of the respondents indicated that they had developed instructional materials for learning disabled students, although 8%, or 42, of the respondents chose to give a narrative answer to this question. Many respondents indicated that learning disabled students made use of the same instructional aids available to the general student population. A number indicated that other support offices on campus prepared such materials for learning disabled students and sometimes information on the library was included. A couple respondents said that audio-tapes of printed guides had been made and one institution noted its audio-tape walking tour, while not originally designed for learning disabled students, was used by dyslexic people. Another institution noted that it taped textbooks for learning disabled students. Several respondents indicated that instructional aids for the learning disabled population were in the planning stages, including one individual who was designing a library research methods course specifically for the learning disabled, adapting it from two other library research methods courses offered at that institution. Another individual was currently involved in revising bibliographic
instruction assignments to better accommodate learning disabled students.

Of the respondents sending copies of instructional aids, more than half sent copies of flyers describing campus-wide services and facilities for disabled people in general. One sent a flyer describing a campus-wide program specifically for learning disabled students. Several sent general library guides designed for all users. A few sent flyers describing library services and facilities for disabled users and one sent an audio-tape script instructing students with print handicaps on how to use the library. The flyers on library services for disabled users and the audio-tape script were the closest to what we had envisioned receiving when we requested copies of library-developed instructional aids. It was disappointing to receive so few library-related aids; perhaps few are in existence. It is also possible that many learning disabled students find the instructional aids provided to the general student population useful.

Question #9: We are interested in establishing a discussion or interest group, perhaps affiliated with ACRL, to address the concerns outlined in this survey. Would you be interested in participating in such a group? (yes, no)

28% of the respondents, or 147 individuals, answered yes to this question, an overwhelming response. Although unable to pursue such an interest group as yet, Langan plans to do so in the
CONCLUSIONS

It is clear that the library plays an integral role in ensuring the academic success of all students. In order to accommodate the most effective processing of information by learning disabled students, librarians must be acutely aware of how best to disseminate information. We must realize that what works best for student A may not work at all for student B. Reference negotiation should include consideration as to whether a student prefers visual or aural instruction or hands on experience, and on and on. Some learning disabled students may not seek librarians out for help, in which case we have to advertise and promote our services aggressively. Coordination of contact among library, faculty, and support services staff is essential so that learning disabled students are aware of the network of campus help available.

Working on this survey has taught the authors many things. Perhaps most significant is that the issues raised in the survey are concerns relevant to all students, not only learning disabled students. Educating ourselves regarding the special needs of the learning disabled population has helped us to be more aware of the diversity of learning styles and the need to package instruction and information in multiple formats. For providing this window, the authors are exceedingly grateful to the learning disabled students on our campuses and to our colleagues.
nationwide who completed the survey and shared their experiences with us. The resulting data, although not entirely conclusive, are well worth sharing with the library community.
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Disabilities and the Developmental Education Program," New 
Question 1: How would you characterize your knowledge of learning disabilities?

Overall:
- Extensive knowledge: 3% (18)
- Moderate knowledge: 41% (217)
- Minimal knowledge: 51% (270)
- No response: 4% (20)
Appendix B

Question 1: Breakdown of level of knowledge by institution type.

159 Two-Year Colleges

- Extensive: 6% (10)
- Moderate: 50% (86)
- Minimal: 40% (63)

77 Four-Year Colleges

- Extensive: 1% (1)
- Moderate: 34% (26)
- Minimal: 60% (46)

271 Universities

- Extensive: 3% (7)
- Moderate: 39% (106)
- Minimal: 55% (150)
Appendix C

Question 2: Do you know the size of the learning disabled student population at your college or university? (yes, no)

Overall responses: 24% (128)

Breakdown of yes responses by institution type:

- Of 159 two-year colleges: 29% (46)
- Of 77 four-year colleges: 25% (19)
- Of 271 universities: 22% (60)
Appendix D

Question 3: What physical services are offered at your institution?

<table>
<thead>
<tr>
<th>Service</th>
<th>On Campus</th>
<th>Library</th>
<th>Other</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talking books, etc.</td>
<td>46% (244)</td>
<td>26% (105)</td>
<td>31% (164)</td>
<td>18% (92)</td>
</tr>
<tr>
<td>Viewing/listening areas</td>
<td>87% (456)</td>
<td>74% (391)</td>
<td>33% (171)</td>
<td>6% (30)</td>
</tr>
<tr>
<td>Computing facilities</td>
<td>85% (447)</td>
<td>44% (232)</td>
<td>66% (344)</td>
<td>6% (31)</td>
</tr>
<tr>
<td>Typewriters</td>
<td>79% (415)</td>
<td>61% (318)</td>
<td>31% (165)</td>
<td>8% (40)</td>
</tr>
<tr>
<td>Calculators</td>
<td>47% (249)</td>
<td>31% (165)</td>
<td>24% (124)</td>
<td>23% (122)</td>
</tr>
<tr>
<td>Kurzweil readers</td>
<td>30% (159)</td>
<td>22% (116)</td>
<td>9% (49)</td>
<td>30% (159)</td>
</tr>
<tr>
<td>Free photocopying</td>
<td>17% (90)</td>
<td>7% (38)</td>
<td>11% (58)</td>
<td>23% (120)</td>
</tr>
</tbody>
</table>
Appendix E

Question 4: What research services does your library offer to learning disabled students?

Question 5: What research services does your library offer to your general student body?

<table>
<thead>
<tr>
<th>Research service</th>
<th>Learning disabled</th>
<th>General</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual reference consultations</td>
<td>92% (482)</td>
<td>87% (456)</td>
</tr>
<tr>
<td>Fee-based online database searching</td>
<td>53% (276)</td>
<td>53% (276)</td>
</tr>
<tr>
<td>Free online database searching</td>
<td>26% (139)</td>
<td>24% (128)</td>
</tr>
<tr>
<td>Bibliographic instruction sessions</td>
<td>86% (449)</td>
<td>83% (437)</td>
</tr>
<tr>
<td>Self-paced workbook</td>
<td>26% (135)</td>
<td>24% (128)</td>
</tr>
<tr>
<td>CAI programs</td>
<td>8% (44)</td>
<td>7% (39)</td>
</tr>
<tr>
<td>Orientation tours:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>slide/tape shows</td>
<td>23% (119)</td>
<td>22% (114)</td>
</tr>
<tr>
<td>audio-tape tours</td>
<td>9% (47)</td>
<td>7% (39)</td>
</tr>
<tr>
<td>self-guided tours</td>
<td>23% (122)</td>
<td>22% (114)</td>
</tr>
<tr>
<td>group guided tours</td>
<td>74% (389)</td>
<td>69% (364)</td>
</tr>
<tr>
<td>video/tape shows</td>
<td>11% (60)</td>
<td>10% (55)</td>
</tr>
</tbody>
</table>
Appendix F

Question 6: Are you aware of what office(s) or department(s) on campus offer(s) academic/counseling, etc. services to learning disabled students? (yes, no)

Overall:

yes: 83% (434)
no/no response: 17% (91)

Breakdown of 434 yes responses:

Of 159 two-year colleges: 89% (142)
Of 77 four-year colleges: 88% (68)
Of 271 universities: 78% (212)
Appendix G

Question 7: What type of formal or informal communication do you maintain with the office(s) or department(s) providing support services to learning disabled students? Please explain with as much detail as possible.

INFORMAL COMMUNICATION
referrals
telephone calls
shared facility

FORMAL COMMUNICATION
shared facility
campus committee involvement
newsletters
lists of student names from support office
notification by library of services and materials appropriate to students' needs