

**How It's Done:  
Examining Distance Education Library Instruction and Assessment**

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**Abstract**

While articles on individual studies, surveys, and programs abound, there is a lack of baseline data regarding what and how libraries provide instruction for their distant populations. Do libraries generally provide information literacy or library instruction to students at a distance? How is instruction usually provided? Is instruction generally assessed? If so, how is instruction assessed? These questions were asked of librarians in an online survey of 143 institutions offering distance programs, randomly sampled from the College Blue Book. With a 55% response rate, data about instruction offerings and assessment were correlated with information about library staff size, budget, and student enrollment. The expectation was that larger libraries with more money and students would provide more and better services, but interestingly these factors had far less influence than anticipated. It seems that the individual efforts of librarians was the major determinant for services offered by libraries at institutions with distant students.

**Introduction**

When the author was first hired as the Distance Education Coordinator for the Mansfield Library at the University of Montana, she wanted to learn how libraries generally instructed their distant populations in the use of library resources and services. She soon realized that it would also be helpful to know if and how libraries generally assessed their efforts in this area. She had her own programs of instruction and assessment, but what could she learn from how other libraries conduct and assess their distant services? Was there an aggregate study describing how libraries generally provided and assessed instruction services for distant students? After researching the literature, one was not readily apparent. The author attempted to create such a study, and tried to correlate demographic data on participating libraries (budget, staff size, institutional enrollment size) with instruction and assessment efforts. Would larger, wealthier, and better staffed libraries provide more to their users and assess their efforts more?

**Literature Review**

Much has been published on individual institutions' outreach efforts to distant students. Based on examination of eleven recent articles on the topic, options generally fall in these areas: Specialized Web pages (Ladner, Beagle, Steele, & Steele, 2004), online tutorials (Cahoy & Moyo 2005), integration into courseware (Presti 2002), mailing of physical guides, print or CD-ROMs (Sacchanand 2002), credit courses (Machet 2005), and face-to-face site visits or orientations (Gandhi 2003). But there seems to be as yet no comprehensive overview of what institutions do generally in support of library instruction for their distance learners.

Assessment of these instruction efforts to distant students has been less studied. While assessment of information literacy instruction in 'traditional' face-to-face contexts has become a buzzword, not as much attention seems to be paid to assessing instruction of students at a distance. Those who discuss assessment mostly mention it as an afterthought, without offering results of surveys or pre-tests/post-tests, for example, but rather as a step to be taken in the near future at an individual institution.

Others take a purely theoretical approach. One example of the theoretical approach includes an analysis of various studies of the efficacy of face-to-face library instruction versus computer assisted instruction showed that both methods seem equally effective for teaching basic library skills (Zhang, Watson & Banfield 2007), although there was little focus in this article on distance education programs and none on assessing instruction in libraries generally as it is typically described. Scales and Lindsay (2005) analyzed student attitudes toward information literacy in their online information literacy course. However, this survey also focused more on the theoretical aspects of information literacy rather than an authentic assessment of the instruction provided. Lindsay (2004) compares two online courses' content and structure as a means of assessment, but again does not discuss ways to assess students' actual instructional experiences. A test of the effectiveness of interactive multimedia for library instruction (Markey, Armstrong, De Groote, Fosmire, Fuderer, & Garrett, 2005) comes closer to evaluating the abilities of various library instruction methods to impart information literacy, but still focuses on the theoretical applications rather than the practical, everyday assessment. The most useful discussion of assessment of distance education comes from Dewald, Scholz-Crane, Booth, & Levine (2000) in which assessment methods and criteria are suggested for library distance education. Does this lack of attention to and evaluation of existing practical assessment mean that general and regular assessment of distance learners' information literacy instruction is not done?

In addition, there seems to be nothing existing in the current literature discussing the effects that budget, staff size and enrollment size may have on libraries' provision and assessment of distant services. Perhaps this is due to the assumption that larger budgets, staffs, and enrollments would naturally lead to more and better services, but it is still an interesting question that should have a more definitive answer.

### **Methodology**

The answer these questions was sought via a survey sent to a sample of librarians at institutions that offer bachelor's or graduate degrees via a distance. The original list was gathered via a random sample of 143 institutions listed in the *College Blue Book, 34<sup>th</sup> edition*, volume 6, *Distance Learning Programs*. From this list contact information was found for either the head librarian or the librarian dealing with distant services for each institution via the institutions' Websites and put into an e-mail list.

The questionnaire was assembled to answer the above questions by asking librarians what services (if any) are provided by them to distant students, and if and how these services were assessed. At the end of the 8-question assessment, instructors were offered the chance to contact the author via e-mail or phone with questions and/or feedback. The survey text can be found in Appendix A.

The survey was administered wholly online, using the SelectSurvey software owned by the University of Montana. This product sends out the survey solicitations via e-mail, tallies and tracks responses, and presents the collected data in exportable formats as well as easy-to-interpret, sharable online reports. As the assessment was conducted entirely online, and notification and solicitations were sent out via e-mail to instructors, this study cost nothing to carry out materially. There were no mailing or printing costs. Additionally, the study could be run quickly since there were no printing or mailing time delays.

The response rate was 55% percent, with 78 librarians responding. Six of these declined to fill out the survey (an option with SelectSurvey's software), yielding 72 complete survey responses to work with. Respondents had two months to reply to the solicitation, and those who had not yet responded by the two-week mark received a follow up e-mail.

Some answers were correlated with data collected about the size of the institution, the number of librarian employees, and/or the library budget. Spearman's rank correlation coefficient was used, as it does not require the assumption that the relationship between the variables is linear, nor does it require the variables to be measured on interval scales. Correlations were deemed statistically significant at the 90% confidence interval level ( $p = .1$  or less), two-tailed.

## Results

Of the 75 responses, the overwhelming majority, 70 or 97%, offered some sort of special support to students at a distance. Only 4 respondents, or 3%, did not. One respondent was not sure.

As for the actual services offered, 58 (85%) had a general Website or guide focused on the needs of distant users. Seventy-two percent (49 respondents) offered online guides or tutorials for particular resources or services, and 68% (46 respondents) had a specific contact person within the library who deals with distant users' needs.

Slightly over half of respondents (35, or 51%) still send print materials to distant students. Fourteen respondents (21%) sent CD-ROMs or other electronic materials to their students, and 20 (29%) had interactive guides or tutorials for particular resources or services. The lowest responses went to classes on how to use the library at a distance, both credit classes ( $n = 7$ , or 10%) and non-credit classes or tutorials ( $n = 11$ , or 16%). (See Figure 1.)

When discussing whether these efforts are assessed, 60% of respondents ( $n = 42$ ) said no assessment took place. Only 26 of the respondents (37%) assessed their library's efforts with regard to distant learners. The primary means of assessment was tracking Web statistics (67%, or 18 respondents), followed by surveys of distant learners (59%, or 16 respondents) and course evaluations ( $n = 14$ , or 52% of respondents). (See Figure 2.)

The remaining questions dealt with demographic issues. Question 5 of the survey attempted to determine the size of the school with which the library was associated, and allowed for a free response of the institution's student enrollment. When evaluating the survey responses, answers to this question were divided into four groups: Schools with less than 3000 students, schools with 3000-5999 students, schools with 6000-9999 students, and schools with 10,000 or more students. There were 17 in the first group, 14 in the second, 17 in the third and 16 in the fourth, with eight not responding. (See Figure 3)

Question 6 asked what kind of distant degrees are offered by the respondent's institution. Master's degrees were the clear leader, with 43% or 28 respondents. Close behind were AAS or AS degrees at 32% (21 respondents) and BA or BS degrees at 35% (23 respondents). A handful of institutions offered higher degrees like PhDs, and a sizable number of institutions offered MBA programs ( $n = 18$  or 28%), certification programs ( $n = 19$  or 29%), or just courses with no entire degree program online ( $n = 17$  or 26%). (See Figure 4.)

Question 7 attempted to break libraries down by size. Respondents were grouped into three categories: Five or fewer librarians, five to ten librarians, and more than ten librarians. Unfortunately this question was phrased poorly—some respondents were not sure if the question meant just librarians, all staff, part time or full time employees or some other combination. Most libraries, 37 of those responding, fell into the larger group, with 16 in the middle group and 12 in the group with five or fewer employees. Seven libraries did not respond to this question. (See Figure 5.)

Question 8 asked respondents for their library's annual budget. There was some resistance to answering this question; 33 respondents failed to answer the question. Those responding were divided up into three groups: Budgets under \$500,000; budgets of \$500,000-\$1,000,000; and budgets over \$1,000,000. Most respondents answering the question fell into the first group ( $n = 15$ ), although the last group ( $n = 13$ ) and the middle group ( $n = 11$ ) were not far behind.

Correlation tests showed a very weak correlation between assessment of services and the enrollment size of the institution with a Spearman's rank correlation coefficient of 0.18. Unfortunately the correlation was not statistically significant at a two-tailed confidence level of 90% ( $p = 0.131$ ). A strong correlation was found between number of librarians employed and assessment of services, but again was not statistically significant ( $r = 0.579$ ,  $p = 0.626$ ). One correlation that was statistically significant was a weak negative correlation between library budget and assessment ( $r = -0.223$ ,  $p = 0.06$ ).

Among services offered, a small but statistically significant correlation was found between enrollment size and the likelihood of a specific Website for distance education library issues ( $r = 0.243$ ,  $p = 0.041$ ). A moderate correlation with strong statistical significance was found between the offering of online tutorials and enrollment size ( $r = 0.368$ ,  $p = 0.0148$ ) and a small correlation between enrollment size and the offering of classes in information literacy ( $r = 0.198$ ,  $p = 0.0955$ ). Number of employees also had a weak correlation with the offering of classes ( $r = 0.218$ ,  $p = 0.657$ ). Interestingly, the only significant correlation associated with budget was a weak negative one regarding the offering of guides in an electronic format not online (e.g., CD-ROM) ( $r = -0.208$ ,  $p = 0.0794$ ).

These correlations should be taken with a grain of salt due to difficulties with answers to the library staff and budget questions especially. It is important to remember as well that correlation does not demonstrate causality. No constants among assessment or services could be demonstrated or proven.

### **Discussion**

The author's theory at the start of this project was that 'larger' schools – those with large enrollment size, larger library staff, and/or higher library budgets – would do more for their distant populations. However, she learned that these factors made little difference. No valid or verifiable patterns emerged, other than the slight and not overwhelmingly significant tendency for schools with higher enrollment to offer a specific Website for distance education library issues, online tutorials, and classes in information literacy. This may merely be a function of the fact that they have more students to deal with and therefore must deal with them more proactively than smaller schools.

As for assessment, the author's theory that larger schools would assess their efforts more often and more thoroughly was also disproved. No significant results emerged except for a slight disinclination for libraries with larger budgets to assess their efforts toward distant students. This seems counterintuitive and may be due more to resistance to answering the budget question at all as opposed to a true resistance among well-funded libraries to assess distant services.

However, a few important results emerged. The first is that libraries in general are supporting their distant students, staff and faculty. The second is that these services are generally not assessed for efficacy or efficiency. Further research could be undertaken to confirm that budget really has no impact on distant services. Another avenue of research could be whether institutions offering distant library services meet or exceed the ACRL DLS Guidelines.

The largest implication for practicing librarians is that the amount and type of services libraries provide to their distant populations have more to do with the efforts of individual librarians than factors like budget, size, and number of librarians, at least as far as the results of this study indicate. While this was not what the author expected to find, it is ultimately a bit freeing. Distance education library services can be to an extent what librarians we make of them, without any expectations based on staffing, budget, or institution size.

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## Appendix A

### Survey Questions

1. Does your library offer any special support and/or instruction to students at a distance?  
Yes / No / Don't know
  
2. If so, what do you offer? Mark all that apply:
  - general Web site/Web guide focused on distant users
  - a specific contact person in the library who deals with distant learners' needs
  - print guides or other material sent to distant users
  - electronic guides or other material sent to distant users (e.g. a CD-ROM)
  - online guides or tutorials for particular resources and/or services
  - interactive guides or tutorials for particular resources and/or services
  - non-credit classes or tutorials in how to use the library at a distance
  - credit classes on how to use the library at a distance
  - other (free response)
  
3. Are your efforts toward instructing distant learners assessed for efficacy and/or success?  
Yes / No / Don't know
  
4. If so, how? Mark all that apply:
  - Web statistics/hits on particular sites or resources
  - surveys of distant students
  - pre- and post-tests
  - course evaluations
  - other (free response)
  
5. What is your institution's student FTE?
  
6. What type of distance degrees does your institution offer?
  - just courses, no entire degree
  - certification programs
  - AAS or AS
  - BA or BS
  - endorsement programs
  - MA or MS
  - MBA
  - PhD, EdD, or JD
  - don't know
  
7. What is your library's FTE?
  
8. What is your library's annual budget?

## **Appendix B**

### **E-mail Solicitation Text**

Hello,

You have been randomly selected from the list of institutions in the College Blue Book 34<sup>th</sup> edition to participate in a survey of how libraries provide for their distant students. This research is in preparation for a possible conference presentation and subsequent publication. The survey is only eight questions long and should take five to ten minutes to complete. It is completely anonymous. There are no known risks involved in taking this survey. Your participation is valuable for determining what libraries do in support of distance education, and I appreciate your time. Please click on the link below to begin the survey, and feel free to contact me with questions or concerns, or if you would like to learn more about the results.

Thank you!

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