

Section II: Summary of Data Gathering Activities

1. Introduction

Questionnaires were prepared by the Needs Study Team with input from the LWG and mailed to school libraries, academic libraries (including community college libraries), and public libraries during the period May 2-10, 2002. The packets included a cover letter, a copy of the questionnaire, and a self-addressed envelope. The questionnaires contain approximately 275 individual response items. A number of questions allowed for open responses.

2. Sampling Design

The Needs Assessment Study was designed to obtain input from all libraries that had received TIFB grants during the period 1997-2001. Determining the sampling design parameters for the academic and public libraries was straightforward. The decision was made to mail a survey to each of the Texas academic and public library systems in the state, since almost all of these institutions had received at least one TIFB grant. The Needs Study Team was able to obtain lists of public and academic libraries receiving grants through a review of the "LB" grantee lists posted on the Texas Telecommunications Infrastructure Fund website and made available to the Needs Study Team in paper form by the TIFB staff. The entire population of public and academic libraries was mailed surveys.

The decision parameters related to the school survey were more difficult. The school population represented a greater challenge in that no list existed showing all of the school library media centers that had received TIFB grants. There are overall 7,467 schools in Texas. It is known that school districts and schools at the local level had received grants from the "PS" grant cycles that provided funds to public schools, yet it could not be readily determined if these grant funds were used in the school library media center or elsewhere in the school or the school district. After discussion, the Needs Study Team determined that the best option for developing a survey population was to assemble the list of schools that had received funds and/or had implemented Texas Library Connection databases in their school library media centers. Texas Library Connection databases are the school equivalent of TexShare databases in the academic and public libraries and are funded in part by TIFB grants in association with the administrating agency, the Texas Education Agency (TEA).

TEA receives an annual appropriation from the TIFB fund for implementation of the Long-Range Plan for Technology that has been \$14.6 million each year for several years. From that \$14.6M, TEA allocates funds for the TLC databases and other technology initiatives. In addition, the agency has received additional TIFB funds through various riders for other projects such as the Ed Tech Pilot program. Prior to the creation of TIFB, TEA funded the initiatives of the Long-Range Plan for Technology from General Revenue funds appropriated from the legislature.

Because no exact list existed as to the school media centers that had previously received TIFB grants, the sample was drawn from Texas Library Connection eligible schools.¹ Unlike the public and academic

¹ To participate in the TLC, a campus must meet the following criteria:

- The school must have a certified librarian to supervise the library.
- The library must have at least one Internet-connected computer for student use, in schools with fewer than 200 students. In schools with 200 to 299 students, the library must have at least two Internet-connected computers for student use. In schools with 300 or more students, the library must have at least three Internet-connected computers for student use.
- The library must have records of its database that can be exported in USMARC format.

libraries, the school survey was distributed to a randomized stratified sample of Texas schools. According to the Texas Education Agency as of August 31, 2002, there are 5,635 schools, including charter and alternative schools, of a total population of 7,467 that participate in the Texas Library Connection. In addition to the public school campuses, 113 private schools, 39 public libraries, and 11 academic libraries are active participants in the TLC for a total of 5,798 libraries of different types participating in the TLC.

The Needs Study Team reasoning on selecting the TLC schools was that these library media centers could at least assess the impact of the TLC online resources on students and teachers and could comment about their training needs in using these online resources. An additional list of schools were added to the TLC member libraries, those schools that received grant funds during the LB 5 grant cycle that was intended to provide funds to schools otherwise not eligible for TIFB grant funds in early grant cycles.

The list of school library media centers that are TLC libraries consisted of 5,768 schools. The Needs Study Team then obtained a random number generator from the Internet (www.Random.org) and selected 600 integers, which, were then used to select schools from the TLC schools list. The Needs Study Team intended to have the sample proportionately represent schools from the 20 Educational Service Center Regions and from the different types of Texas schools. Presently according to TEA, the schools are 54% elementary schools, 19% Middle/junior high schools, 21% High schools and 6.3% Elementary-Secondary Schools. Once the sample was pulled, the Needs Study Team matched the sample against these criteria to ensure that the sample reflected the desired regional and school characteristics. The final sample included schools from the four types as well as a number of "special" schools such as magnet and charter schools.

The sample size for the questionnaire distribution to the schools was set at 600 schools. A random number table was used to select the sample from the list of Texas Library Connection eligible schools. After the sample was pulled, the sample was manually checked to ensure that the sample proportionately represented schools from the 20 Education Service Center Regions and also proportionately represented different types of schools (Elementary, Middle/Junior High, High, and Elementary/Secondary Schools). Some charter and alternative schools also were selected to receive surveys.

In addition, 149 schools that are not TLC members but whose schools received TIFB grants through the LB – 5 grant cycle also received surveys.

Survey personnel used the Texas Library Connection and TEA listserv to encourage school librarians receiving the surveys to fill them out and to return them. Survey personnel also e-mailed the Education Service Center library contact persons and urged them to contact schools in their area to download a survey and to fill it in and to fax it back. In addition, a number of school librarians voluntarily returned additional surveys that they had downloaded and completed.

3. Survey Data Collection Methodology

The needs assessment methodology relies on a number data gathering strategies including review of background documents, such as technology needs assessment reports; research results and impact surveys from Texas and other states; a review of the Quality Assurance Program results from KPMG; interviews with key informants, focus groups with representatives from academic, community college, public and school libraries. The Study Team also used an online survey of public librarians asking the types of questions they receive from users; and a mailed survey to academic, public and school libraries assessing their future needs as related to planning for future TIFB grant cycles.

The participating campus must agree to *Conditions of Participation* that require responsible use, training seminars, and demonstration that TLC resources are integrated into student learning.

4. Survey Questionnaire Development

Three questionnaire instruments were developed to survey academic, public, and school library media centers. The Needs Study Team developed a set of survey questions for each type of library based on the Framing Questions that had been earlier developed and reviewed with the Library Working Group and which were considered to represent the type of information the LWG desired to have gathered through the surveys.

Due to the number of issues that were to be raised in the survey, the open-ended responses were kept to a minimum. One category of questions was yes / no responses. Questions that sought opinion and attitude rather than straightforward responses were developed using a four-point scale with statements ranging from “strongly agree” to “strongly disagree.” Other questions utilized scales to test respondent agreement or disagreement on the importance or unimportance of certain factors. Scales were numbered from “4” for “strongly agree” or “very important” to “1” for “strongly disagree” or “very unimportant.” Each question utilizing a scale provided a category for “do not know.”

After the set of questions was developed, drafts of the questionnaire instruments were reviewed with the Library Working Group at a meeting held April 9, 2002 at THE University of Texas Southwestern Medical School. The Library Working Group was asked to provide comments and review of the questions through April 23, 2002. Next, the survey instruments were formatted and distributed to academic, public, and school library media center librarians in order to pre-test the survey instruments. The pretest concluded April 30, 2002, and the final forms of the surveys were prepared.

5. Survey Distribution and Data Collection

Questionnaire packets were prepared that contained a cover letter, the survey instrument and a self-addressed return envelope. The cover letter provided the survey respondents with contact information in the event they had questions about filling out the surveys. The school media center surveys were mailed out during the week of May 6th, the public and academic surveys were mailed during the week of May 13, 2002. School library media personnel were asked to return the questionnaires by May 22, 2002, the academic and public libraries had a deadline of May 27, 2002. In addition to the mailed surveys, the surveys were posted in online form and e-mails were sent to the Educational Service Center library contact persons, asking them to encourage their regional members to locate survey instruments online. Phone calls were made to Educational Service Center library contact persons and school library media center staff asking them to complete and return surveys.

6. Preparation of the Survey Data Base

Input of data from the completed questionnaires was conducted by the Texas Center for Digital Knowledge at UNT. Student workers were recruited to perform the data entry. Editing of the survey input, the process of checking each questionnaire for missing responses and duplicate responses, and for clarification of codes for the data entry people was also carried out during the first ten days of June. The Texas Center for Digital Knowledge also created the survey file in Excel and the responses as an SPSS file.

7. Data Analyses

Using statistical procedures appropriate both to the data collected and to the objectives of the surveys, the Needs Study Team analyzed the data using the SPSS statistical package. The results were first loaded into the SPSS software program that provided frequency and a detailed analysis for each question. Microsoft Excel was utilized to convert the question results into pie and bar charts. In addition,

cross tabulations were constructed for a number of questions. The key questions assessed were whether there was a connection between the frequency of use of the TexShare/TLC databases, staff training needs and the future needs of libraries.

Descriptive statistics are used to analyze the data collected in this study. Descriptive statistics include measures of the number and percent of responses for each question.

The results summaries report the number of respondents to a question as "n", which refers to the number of responses to the particular question. A comparison of total responses and missing cases, which represent non-responses to questions is given in the detailed listing of each question.

Questions that employed scales were added and then divided by the total number of scores to give an average or a mean score. A number of question responses are displayed as means scores in the results. The Technical Appendix for this report includes a detailed breakdown of the descriptive statistics for each question in the survey questionnaire.

Four summaries of the results were prepared, for the academic, public, and school media center data. The final report contains the summary comparing the results from the three surveys.

The data from each of the surveys was loaded into Excel spreadsheets and charts were produced for many of the survey questions to display the data graphically. Coding categories were developed for all of the open-ended questions and open-ended responses were then coded. Information about the open-ended responses is included with the data summaries and is also included in the Appendix.

8. Size Categories for Public and Academic Libraries

In order to perform additional analysis, the public library respondents were classified according to population served. The public libraries had previously been coded by size categories for use in the ZLOT survey and this scheme was utilized in the Needs Assessment analysis. Public library size categories were assigned using the Texas Library Systems Act's (TLSA) scheme for determining library system membership categories. The following table lists the number of public libraries in the study population by size category.

Table 1
Number of Public Libraries by Size

Category	Population Served	Number	Percent
Small	0 – 10,000	321	58.3
Medium	10,001 – 100,000	199	36.1
Large	100,001 or more	31	5.6
Total		551	100.0

The following table breaks shows the public library respondents by size categories and also displays the percentage of the total number of public library respondents in each size category.

Table 2
Public Library Respondents by Size

Category	Population Served	Number	Percent
Small	0 – 10,000	148	54
Medium	10,001 – 100,000	105	38
Large	100,001 or more	20	7
Total		273	100.0

Academic libraries were also coded into one of three size categories. As with the public libraries, the academic libraries had been coded for analysis purposes in the ZLOT survey, and these codings were used in the Needs Assessment analysis. The size categories were adapted from enrollments, as measured in full-time student equivalents (FTSE). Data was used from the *Annual Report of Public Universities from the Texas Higher Education Coordinating Board* for fiscal year 2001 to classify 4-year public institutions, data from the *Annual Report for the Independent Colleges and Universities in Texas (ICUT)* was used to classify independent colleges and universities and 2-year community and technical colleges. The following table lists the number of academic libraries in the study population by size category.

Table 3
Number of Academic Libraries by Size

Category	Enrollment (FTSE)	Percent
Small	Less than 2000	32.7
Medium	2,001 – 9,999	51.0
Large	10,000 or more	16.3
Total		100

The following table displays the academic library respondents by size categories and indicates each category's percentage of the total number of academic library participants.

Table 4
Number of Academic Library Participants

Category	Enrollment (FTSE)	Percent
Small	Less than 2000	27
Medium	2,001 – 9,999	47
Large	10,000 or more	26
Total		100

Size category data was not available from the ZLOT Survey for school library media centers and no categorization was attempted in the Needs Assessment Survey.

9. Frequently Asked Questions Survey

The needs assessment Study Team was not charged with obtaining input directly from users regarding their use of online resources and their future needs for technology support. Indirect evidence was gathered through the survey instruments. In addition, the Needs Study Team utilized an online survey tool available on the Internet and available from www.createsurvey.com to ask public librarians about the types of questions they receive at the reference desk and their use of online TexShare databases to answer these questions. These data are intended to supplement and extend the needs assessment surveys sent to academic, public and school libraries with some additional information about categories of information needs.

The first survey instrument was mounted at the Northeast Texas Library System (NETLS) approximately June 1, 2002. The survey was later mounted on system web sites by the rest of the Texas Library Systems around the state for the period through June 15, 2002. A set of tabulated responses was created for each of the systems. The summary of the results from this survey are included on the project website.

10. Summary of Focus Groups With the Representatives from Different Types of Libraries

The Needs Study Team conducted a total of eight focus groups using telephone conference calls to connect the participants with the moderator. Focus group sessions held between May 13 and June 5, 2002, include the following:

	<u>Date</u>	<u>Invited</u>	<u>Participated</u>
ESC Library Directors	5/13/02	10	2
“Mixed” School Library Directors	5/13/02	27	6
Large School Districts Library Directors	5/22/02	26	4
Community Colleges Library Staff	5/22/02	25	7
Academic/Academic Medical Library Staff	5/23/02	29	7
Large/Suburban Public Library Staff	5/24/02	53	11
Small School Libraries Staff	5/28/02	38	5
Small Public Library Staff	6/05/02	19	7

Potential participants were identified from TIFB grantee institution lists, from other databases available to the Study Team, and from personal interviews and contacts made by Team members. Invitees were notified of focus group times by telephone and/or e-mail.

Focus groups participants were selected to represent all types and all sizes of TIFB library grantee institutions. Representatives were sought in all areas of the state in order to ensure that the diversity of TIFB grantees was well represented. Most participants were either senior or mid-level library managers; a few participants were informants selected because of broad knowledge of their library constituencies. There was focus group participant coverage by library size, type, and region.

Transcripts of the focus groups were prepared and the summary of the key points is given in Appendix II. A follow-up focus group form was sent to all participants as well as invitees who were unable to attend the focus groups. Appendix II also contains a summary of responses from the online focus follow-up forms.

11. Presentation of the Preliminary Report and Results

Prior to a scheduled May 29, 2002, meeting with the Library Working Group, the Needs Study Team filed a *Preliminary Report* that contained a presentation of the design and execution of the surveys followed by a presentation of the results of the data analyses as of that date. The Needs Study Team met with the Library Working Group (LWG) to present the preliminary results of the surveys and to discuss their preliminary implications.

12. Final Survey Documents

The Needs Study Team has assembled the surveys and the survey results into a number of documents.

- 1) The questionnaire instruments – included in the Appendix IX.

- 2) A report of the design and execution of the surveys by type of library, academic, public, school library media center – included in the Appendix IV.
- 3) Survey results with frequency distributions for each question can be found on the Project website. URL: www.unt.edu/needz