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Each year the Association of Library and Information Science Education (ALISE) publishes the *ALISE Statistical Report*. The report contains statistical information on library and information science programs that are accredited by the American Library Association (ALA). The current process for collecting and compiling statistical data from schools involves many manual tasks. Among these are paper questionnaire submission via standard mail, input of data into several databases for archiving purposes, and compilation of statistics by individual authors of the report's five chapters. This paper describes the development of an online questionnaire system, to collect the statistical data and automate the process of data input, data update and data storage. A usability study was also conducted to gather feedback from users and to improve the user interface.

HEADINGS:

Online survey--Design

Database--Management--Systems

Information system--Design

Interface design

Web databases

THE ALISE PROJECT:
DESIGN OF AN ONLINE QUESTIONNAIRE FOR INTEGRATION AND
PROCESSING OF STATISTICAL INFORMATION

by
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1. Introduction

The Association for Library and Information Science Education (ALISE) is a non-profit organization whose aim is to promote excellence in research, teaching, and service for library and information science education (<http://www.alise.org>). Each year, ALISE publishes the *Association of Library and Information Science Education Statistical Report*, currently in its 23rd year of publication. The statistical report contains statistics and objective analysis of various aspects of LIS programs offered by schools that have been accredited by the Committee on Accreditation (COA) of the American Library Association (ALA). Currently there are 56 schools participating in the ALISE Statistical Report project.

ALISE collects data on the schools and their students, faculty, curriculum, income and expenditures, and continuing education activities as base information for the statistical report. Currently, participating schools use a paper questionnaire to provide their information and send it back to ALISE editors by standard mail. This process is time- and effort-consuming. With the development of Web technology, ALISE wants to take advantage of online capability and automate the data collection process by providing a database-driven online questionnaire system. ALISE Statistical Report Online Questionnaire System consists of a database to store the ALISE statistical data submitted, as well as a set of online interfaces designed to let the participating schools submit their statistical data directly from a web interface to the back-end database via the Internet.

This paper describes the design, and development of the ALISE Statistical Report Online Questionnaire System, including changes made to the backend database as a result, and a usability study of the system interface.

2. Project Background

2.1 Project Introduction

The *ALISE Statistical Report*, provided as a service to the association members, is intended to “compile, analyze, interpret, and report statistical (and other descriptive) information about library/information science programs offered by schools that are members of ALISE ¹.” Each year a new edition of the report is generated based on the data collected from participating schools. The report contains five chapters: Students, Faculty, Curriculum, Income & Expenditure, and Professional Continuing Education. In each chapter, data compiled from one of five questionnaires submitted by schools are reported and discussed. (The names of the questionnaires correspond to the chapter names.) Please refer to Appendices 1-5 for the original paper questionnaires.

Compiling the report requires the following steps:

- Questionnaire distribution
- Data collection
- Data analysis and report generation.

In the past, this process has been done manually. ALISE editors printed and mailed the questionnaires to schools. LIS administrators of each school completed the questionnaires and sent them back to the ALISE editors via standard mail. As the questionnaires arrived, they were sorted by chapter. Once all questionnaires arrived, each

set was mailed to the chapter author. Each author was responsible for compiling and aggregating data from all questionnaires they received from the ALISE editors. After completion, each author sent the chapter in Microsoft Word format back to the ALISE editors. The editors and their assistant applied the same style and formatting to all chapters, checked for and corrected errors in statistical calculations, and edited and consolidated the five chapters into the *ALISE Statistical Report*.

In 1995, Dr. Daniel and Dr. Saye of the School of Information and Library Science (SILS) at the University of North Carolina at Chapel Hill submitted their proposal to serve as the co-editors of the ALISE Statistical Report. They proposed to establish a database and automate the data collection and analysis process, thereby replacing the current manual process. The executive board of ALISE accepted the proposal in December 1995. Since then, the automation of the ALISE Statistical Report Project has been proceeding. In 1997, the ALISE team began creating Access databases to store data from the Students, Faculty and Income & Expenditure questionnaires for archiving purposes. However, these databases are independent from each other, and all the data from the above three questionnaires are entered manually, questionnaire by questionnaire. Since 1997 the *ALISE Statistical Report* has been also available online, as well as in printed form. The online report contains the same information as the paper report, but there is a slight difference in format. In the paper report, tables containing data and statistics are embedded within the text; in the web version, the tables are separate but can be linked to from within the textual report.

The next major step in the automation process was the distribution of questionnaires online. This attempt was first made in 1998 and fully implemented in 2000. Prior to 2000,

questionnaires were mailed to schools, and in recent years, were also available online. This move eliminated the need for ALISE editors to print and mail questionnaires to schools. With the success of this change, the ALISE team wanted to further the automation and design a database-driven online questionnaire system to automate the data collection process.

During the first phase of the development, Heather Wolf created a relational Access database based on the logical analysis of the data collected². The Access database comprised 29 tables, which captured all the data across the five questionnaires. She also created a prototype of the online questionnaire, which was composed of one login page, and two pages of the Students Questionnaire. The prototype was implemented using Active Server Page (ASP).

2.2 Project Scope

The goal of the second phase, described in this paper, was to design and implement a comprehensive web-based database-driven questionnaire system to automate the process of data collection of the entire set of questionnaires.

The main part of the project concerned the design and development of the data submission component. It comprises five separate sections corresponding to the five chapters in the paper questionnaires: Students Questionnaire; Faculty Questionnaire (non-confidential section); Curriculum Questionnaire; Income and Expenditure Questionnaire and Professional Continuing Education Questionnaire.

The system requires a password-protected login control mechanism to prevent unauthorized data entry. Each school will be assigned a unique user name and password.

Users trying to access the system are required to provide the correct user names and passwords; otherwise access will be denied. Each page within the system also contains the password checking mechanism; which prevents someone from opening a single page within the system by merely attempting to type in a corresponding URL.

Since data in each chapter has its own characteristics, the design of each part varies in terms of structure, navigation, data checking mechanisms, page layout, etc., each of which are detailed in the system description and design decisions section.

A usability test was conducted to collect user feedback for the future improvement of the interface.

3. Project Description

3.1 User analysis

Wolf conducted a very thorough analysis of the users of the system in the first phase of development. According to her, potential users of the ALISE statistical information data collection and reporting process can be categorized into three groups: 1) those who submit school data via questionnaires to ALISE editors, 2) those who process that information and prepare it for publication, and 3) those who access information contained in the paper report and/or on the web site³.

The first user group consists of LIS administrators from ALISE member schools who fill out and submit questionnaires each year. The second group, responsible for processing the questionnaires and reporting data, consists of the editors, authors, and their assistants. The third user group, those who access the information compiled by ALISE, consists of LIS administrators and faculty, current and prospective students of library and

information science, journalists, others interested in statistics on ALA-accredited programs in library and information science, and the general public ⁴. Each group imposes specific requirements for the system and system design needs to take these requirements into considerations.

Within the scope of this project, specifically the online questionnaire system, the first user group is the primary one. The user analysis presented in the next section therefore focuses on this group. Design considerations regarding this group include the transition to a new method of data submission, time constraints due to busy schedules, confirmation of questionnaire submission/completion, and ease of use.

3.2 Task Analysis

The frequency or timing of the task

- *How frequently do users perform the task?* On average, once a year, when prompted to submit the school's current information.
- *What are the time constraints on the task?* There is a submission deadline for all sections of the questionnaire.

The complexity and difficulty of the task

- *How complex is the task?* The task is not complex, just extensive. Users have approximately two months (from middle August to middle October) for data entry. The data volume is comparatively large. On average there will be around 20 consecutive data submission pages for each chapter. Users need to go through each page and provide corresponding information. The volume of the data submitted increases the overall complexity of the task.

- *How structured is the task?* The task is highly structured and predictable.

The relationship of the task to other user tasks

- *Is system use mandatory or discretionary?* System use is discretionary at this point. It is still possible to submit a paper questionnaire to ALISE instead of using the web interface, but in the near future, it is expected that all users will be required to use the system.
- *How important is the task?* The task is very important to ALISE as it maintains a comprehensive listing of school information.

The physical environment of task performance

- *Where is the task performed?* The task is performed in a typical university office setting with good lighting, moderate temperature, low dust levels, etc.
- *What other tools does the user have?* Users have information about their school available, which may be in several different locations and forms. Although how they organize it before it gets entered is outside the scope of our system, it may still have an effect on system design, for knowing how users collect and organize the data can help us with a logical and feasible design, which will possibly reduce the data entry errors.

Planning for learning and breakdowns

- *What training will be provided? How is the task learned?* No face-to-face training will be provided. Use of the system should be self-evident. Tasks are structured to resemble the printed questionnaire that has been used in the past.
- *What happens when things go wrong?* Users can contact ALISE directly by email.

3.3 Business Requirements

There are some general requirements for the design of the online ALISE questionnaire.

- The new system should be able to collect all types of statistical data currently presented both in the paper report and on the web site.
- Rather than being entered by the user, values for specified total fields will be calculated on the fly using ASP, and then entered into the database.
- The new online questionnaires should employ data validation to prevent data type mismatch. For example, in paper questionnaires, a user may enter text data when numeric data are required or he/she may submit data that is inconsistent with total calculated from data entered previously.
- Access security should be implemented via the login page; therefore, only authorized personnel can access to the online questionnaires.

3.4 Risk Assessment

After careful analysis of the business requirements of the project and the objectives that must be met, the following risks have been identified:

- Security
 - The log-in page must keep unauthorized users out.
 - Data needs to be stored securely so that unauthorized individuals do not obtain information.
- Data integrity
 - False or incorrect data may be entered by the user.
 - Data may be entered more than once causing redundancy or inconsistency.

- Accessibility
 - The server needs to be able to handle the load. Currently there are 56 schools participating in the project. Each school may have 1-5 LIS administrators entering the data. So the total number of users of the system is between 56 and 280.

3.5 Technology Justification

Active Server Pages (ASP) was chosen to implement the online questionnaire for several reasons.

- The database was designed in MS Access. ASP is the major dynamic web application product developed and promoted by Microsoft. It works seamlessly with the MS Access database.
- ASP is both simple to use and very powerful. More importantly, it provides full programming capability, unlike a tool such as ColdFusion, which "hides" much of the functionality from the developer. To develop in ASP, one must write all code necessary or access specific code contained in prewritten objects. Although ColdFusion is an extremely powerful tool, it is geared more towards developers with little or no programming experience. The online questionnaire submission involves server-side calculations and validation based on those calculations. We felt that developing this functionality using ASP was more straightforward and provided a valuable programming experience.

In addition to ASP, we also incorporated JavaScript into the system to implement data validation, the comment mechanism and the definition mechanism, which will be

elaborated in the decision and system description section. JavaScript is a client-side script, which works well for the data validation and popup windows. By using client-side scripting, we were also able to shorten the response time of the data validation, and alleviate the load on the server.

3.6 Critical principles and factors

The following aspects are important factors that need to be taken into consideration in implementing the system:

3.6.1 Limitations and constraints of existing database design on web application

The database was designed before the application design of the online questionnaires. Since it is the backbone of the whole system, its design can substantially influence the design of the online application in various ways.

In implementing the online questionnaires, I primarily based the online system on the structure of the existing database, but modifications to the database were also made when new features needed to be included or when the existing system could not provide the flexibility and ease of use that the online application requires. There were additions of tables and reorganizations of data. For example, in the original design there was no provision for users' comments. In implementing the system, comments were regarded as an indispensable and important feature of the system; therefore six tables were added to collect comment data.

In general, however, the overall structure of the database was maintained in the implementation.

3.6.2 The internal logical relationships among data

Understanding the relationships among the data and how users collect them is crucial in designing a logical system, which facilitates users orientation and reduces data entry errors. All the design details, such as grouping and ordering questions, deciding in what format to provide the definitions, etc. will substantially affect users interaction and success with the system.

Thanks to regular meetings with the ALISE editors, Dr. Evelyn Daniel and Dr. Jerry Saye, my understanding of the data and users was highly enhanced, which greatly helped in the design of the system.

3.6.3 Maximum vs. minimum display

One of the biggest differences between the paper questionnaire and the online questionnaire is what we call the “content display principle”. Since the paper questionnaire is fixed and static, it looks the same to all users. It must contain all the content necessary for any user’s maximum need. Users with smaller data collection needs must go through the entire content, select the few relevant fields to enter data and leave the rest blank. This approach illustrates a limitation of the paper questionnaire. The whole process is time-consuming, confusing and open to errors.

An online questionnaire, in contrast, pursues the minimum displaying principle. It is a dynamic mechanism, which can tailor the content to display according to each user’s need, while hiding unnecessary information or questions.

In designing the online questionnaire, I was fully aware of the difference between the two formats and strove to incorporate the dynamic, well-tailored content display mechanism into the system.

3.6.4 The interface design principles

The online questionnaire is an online information system, which is presented to users through interfaces; therefore several design principles⁵ were taken into consideration.

- Visibility of system status: The system should always keep users informed about what is going on, through appropriate feedback within reasonable time.
- Match between system and real world: The system should speak the users' language, with words, phrases and concepts familiar to the user, rather than system-oriented terms. It should follow real-world conventions, making information appear in a natural and logical order.
- User control and freedom: Users often choose system functions by mistake and will need a clearly marked "emergency exit" to leave the unwanted state without having to go through an extended dialogue. In the online questionnaire system, the task itself does not allow a great deal of freedom on the user's part; however, the control aspect is applicable.
- Error prevention: Even better than good error messages is a careful design, which prevents a problem from occurring in the first place.
- Consistency and standards: Users should not have to wonder whether different words, situations, or actions mean the same thing.

3.6.5 Consistency with the paper version

As stated above, one of the business requirements of the system is that the new system should be able to collect all types of statistical data currently presented both in the paper report and on the web site, which means there should exist a consistency between the paper questionnaire and the online questionnaire in terms of content.

3.6.6 Flexibility to accept “extra” information using comment fields

Users may need to provide additional information about data they enter. A comment field mechanism is provided for each field.

4. Design Decision and System Description

This section opens by describing the overall structure of the system and the features that are shared by all the questionnaires. Then it describes the individual design decisions and features for each questionnaire.

4.1 Overall structure and shared features

4.1.1 Overall structure

Each questionnaire of the system was designed as a complete and independent unit including an introduction page, a set of questionnaire content pages and a page that confirms completion of the questionnaire. There are two scenarios of use for each questionnaire: the submit scenario, where users initially enter data and then click the submit button at the bottom of each Web page to submit data, and the update scenario, where users update previously submitted data when input errors occur. Normally, the

update scenario follows the submit scenario, but exceptions exist. For example, the first part (Questions 1-16) of the Curriculum Questionnaire contains questions to which the answers change infrequently, while the second part (Question 17-25) contains questions to which the answers change from year to year. We decided to provide users two different structures for these two parts. For the first part, we provided users with the data submitted in the previous year, so that users just need to update their information instead of reentering it. This is actually an update scenario in format. After users complete the first part, updating any information that has changed since last year, they will enter current data in the second part, later updating it if needed.

4.1.2 Comment mechanism

Another architectural feature that appears in all the chapters is a special comment window where users can enter additional comments on most fields. The challenge in designing the comment mechanism lies in the fact that it is possible for users to make comments on any field, so the comment mechanism must enable users make comments on every single field on every single page. At the same time since the comment mechanism is just a supplementary component of the system, the design should be simple and portable, and unobtrusive when not wanted.

After several rounds of trial and evaluation, a simple and effective popup window was designed, and it was attached to each questionnaire content Web page. The popup window was chosen because it separates the comment mechanism from the main flow of the questionnaire, so that users will not get confused between the data fields and the supplementary comments. More importantly, this part of the code can be stored as a

separate Web page. A user who wishes to enter a comment clicks the button on the main page and open the comment window. The ID of the page that the user opens is automatically passed to the window, and the user just need to enter the number of the item (which is clearly marked before each item) on which he/she wants to make comment, and the comment itself. After the user writes the comment and clicks the submit button, a follow-up Web page appears that confirms the number of the item he/she just commented along with two options:

1. Choose to enter a comment to another item
2. Exit the comment window and back to the main page

This approach to the comment mechanism applies one of most important programming principles: encapsulation, which saves repeating code on every Web page, enables reuse of code and helps improve system performance. All the data collection Web pages of one questionnaire share the same comment Web page and follow-up page. Therefore, for the whole system, there are only 5 sets of comment and follow-up Web pages, while still allowing comments on any single item throughout the whole questionnaire system.

4.1.3 Progress Indication and Derivative Questions

Indication of progress through the questionnaire is another important feature of the system. It reflects the user interface design principle “visibility of the system status” described in 3.6.4, namely to keep users informed what is going on. To complete one questionnaire users normally need to fill in an average of more than 20 pages. For this long process it is helpful to provide a progress indicator to inform users how much of the

questionnaire they have completed. This gives them an overview of their progress. If users have time constraints on completing the questionnaire, this also helps them allocate their time for each question. The progress indicator has striking colors and is placed at the same location on each page for each chapter. This reflects the interface design principle “consistency and standards” described in 3.6.4.

The original design of the progress indicator was based on the total number of pages included in each questionnaire. The indicator showed the total number of Web pages in the questionnaire and the number of the current Web page. For example, 14/20 would indicate that there were 20 Web pages altogether in this questionnaire and the user was currently at the 14th page. The advantage of the design is that it is clear and intuitive.

However, this design has an unavoidable problem: For most of the chapters of the questionnaires there is no fixed number of total pages. The total number varies from school to school, because there are some derivative questions.

A derivative question is a question that is derived from a higher-level question. For example, users will first be asked whether their school provides a certain type of service. If the answer to this question is “yes”, users will further be asked a series questions regarding the details of this service; otherwise, they can skip them and jump to the next question. Several chapters of the questionnaire system include this type of questions.

In the paper questionnaire, due to the static display of the paper format all these questions are displayed on one page. Users need to read and follow the instructions to select the relevant questions they must fill out, because they are provided more questions than they may actually need. In the online format, however, I can design a more efficient way to select and display the content specifically for each individual. To achieve it, I

designed a multilevel structure mechanism based on the structural features and internal relationship of the questions. Most derived questions could be handled using a two-level structure. In this structure the main question and its derived questions were separated onto two pages. Scripts were added to the first part of the second page to check the answer to the main question. If the appropriate answer is given, users will be brought to the derived questions; otherwise, they will be brought to the next page without ever being aware of the hidden derived questions. For example, in the Continuing Professional Education Questionnaire, there is a question regarding continuing education (CE) courses designed for practitioners: “Do you offer CE courses specifically designed for practitioners who were not candidates for a degree (i.e., not enrolled in 6th year, masters, or doctoral degree programs) for which academic credits were granted?” If the answer to this question is “yes”, the user must answer a series of questions about these courses; otherwise, the user skips these questions and goes directly to the next page.

The derivative questions made it very hard to design the progress indicator, since the denominator may vary depending on users’ answers to specific questions. The change of denominator as the user proceeds will inevitably cause confusion. Therefore a different approach was needed.

To solve the problem, I consulted with Dr. Barbara Wildemuth, interface design specialist of SILS. This problem is common in designing a progress indication system, especially in large survey systems. One possible solution is to reconsider the base unit of the progress, that is, to count something other than Web pages. Dr. Wildemuth’s suggestions shed a new light on my approach to this problem. I reexamined the structure of the questionnaires and the derivative questions, and came up with a new design. In the

paper questionnaire, the main question and its related derivative questions are all sub-questions, and they are grouped as one single question set numbered with different subsets, for example, 1.A, 1.B and 1.C. This structure suggests that users think about the question as the basic unit, regardless of the number of derived questions they must complete. Therefore, the question is a more natural indication of progress than the page, it carries over from the paper format to the web format, and it is also easier to implement in a logical way.

Based on the above consideration, the progress indicator was then changed to base on the question instead of on Web page.

4.1.4 Data validation mechanism

The questionnaires collect various types of data: numeric, binary, date, text and memo. Since the data are collected for statistical purposes, numeric data are the most important data type collected. One of business rules of the system requires that the new online questionnaires should employ data validation to prevent data type mismatch. To meet the requirement, a numeric data validation mechanism for each numeric field was created using JavaScript. Whenever users enter a nonnumeric value on a numeric field, an error message will pop up reminding users of the type of data needed, and asking them to check and reenter valid data.

Besides numeric data type checking, other data validation mechanisms, such as checking that required fields are filled in and that a valid email address is entered were also provided to ensure data quality and reduce data entry error. On the contact information Web page, users are requested to enter their name, title, phone number and

email address. These fields are all required fields. If a user fails to complete a field such as title, when he/she clicks the submit button, an error message will pop up that says “Title is a required field, please enter your information in that field before you proceed”. Only when the user completes all the required fields, can he/she proceed to the next page. Another example is for checking the validity of email addresses. When a user enters an email address, a checking mechanism is invoked to validate it. If the email account entered is an active email account, the user will successfully proceed to the next page, otherwise an error message shows up reminding the user to check the data entry and correct it before proceeding.

This data validation mechanism enhances data quality and helps prevent data entry errors. This approach also reflects the interface design principle “error prevention” described in 3.6.4.

4.1.5 Concept Definition

The concept definition mechanism is another important feature of the system. The questionnaire system contains many concepts that users may need to have explained. For example, in the Continuing Education Questionnaire, Question 1.A. col. 4 asks about the number of programs that offered CEUs. A CEU refers to Continuing Education Unit, which is defined as “Ten contact hours of participation in an organized continuing education experience under responsible sponsorship, capable direction and qualified instruction” in the questionnaire ⁶. Users need to understand this concept before they can understand what data they should enter.

A popup window mechanism was designed to display the definitions. All the concepts for which the paper questionnaire provides definitions were highlighted as active hyperlinks. When a user has questions regarding a concept, he/she clicks on the hyperlink of the concept. A popup window with the related definition shows up. Users can close the window after they finish have read the definition.

4.2 The Students Questionnaire

There are several characteristics of data in the Students Questionnaire whose corresponding mechanisms deserve discussion.

First, data integrity checks are required for record values. Based on the data entered into the master table on the first data entry page of the Students Questionnaire, the following totals are calculated by ASP on the fly: *total number of fulltime students, total number of part-time students, total number of fulltime female students, total number of fulltime male students, total number of part-time female students, total number of part-time male students*. In the subsequent pages, users are asked about registration numbers based on various criteria: registration by age, by ethnic origin, by instate or out-of-state status and so on. When these values are entered, the total values are automatically calculated and compared with the values calculated from the master table. If they do not agree, this indicates that users must have made some mistakes either in their data collection or data entry. Users are redirected to the previous page with an error message indicating the discrepancy, and they are then asked to make the correction. If the totals agree, users will successfully proceed to the next page.

This illustrates the advantages of the online system over the paper questionnaire. In the paper questionnaire, users have to calculate all the totals themselves, which is a tedious and time-consuming process. Although in the paper questionnaire there are clear instructions that the total values of different categories should be equal, there is no mechanism to enforce that requirement, so discrepancies may still occur. When the chapter authors compile the data and find a discrepancy, they have to contact the school for the correct data. But with the online system, all these problems are avoided. Total values are automatically calculated by the system. Users are still responsible for providing accurate data, but the online system saves time and effort as well as improving data quality.

The second interesting characteristic of the Students Questionnaire concerns how we divide its two-dimensional question tables from the paper questionnaire into logical sections for the online questionnaire. The Students Questionnaire consists of a series of two-dimension question tables such as the one shown in the following example (see Appendix 1 for the Students Questionnaire).

One dimension is degrees/programs, and the other is the topic of the questions, in this example, gender and enrollment. Degree/programs include eight categories: 1. Bachelor's; 2. ALA-Accredited Master's – Library Science; 3. Master's Information Science; 4. Other Master's; 5. Post-Master's; 6. Doctoral; 7. Other Undergraduate; 8. Other Graduate. Topics include: 1) Student Enrollment by Program and Gender; 2) Degrees and Certificates Awarded by Gender and Ethnic Origin; 3) Enrollment by Gender and Ethnic Origin; 4) Number of In-State/In-Province and Number of Out-of-State/Out-of-Province Students Enrolled; 5) International Students Enrolled by Program Level and Gender; 6) International Students Enrolled by Country of Origin and Program Level; 7) Students Enrolled by Age and Gender; 8) Scholarship and Fellowship Aid; 9) Assistantships; 10) Tuition and Fees.

In designing the online questionnaire, one of the challenges is to decide how to divide the two-dimension question tables into logical sections to fit the online format. We need to divide the table, because we cannot put such a large table on a single Web page for data entry. After careful and thorough examination of the content of the questionnaire and consultation with Dr. Daniel and Dr. Saye, we decided that the data would be divided and organized by the dimension of degrees/programs. This decision reflects the following two design principles.

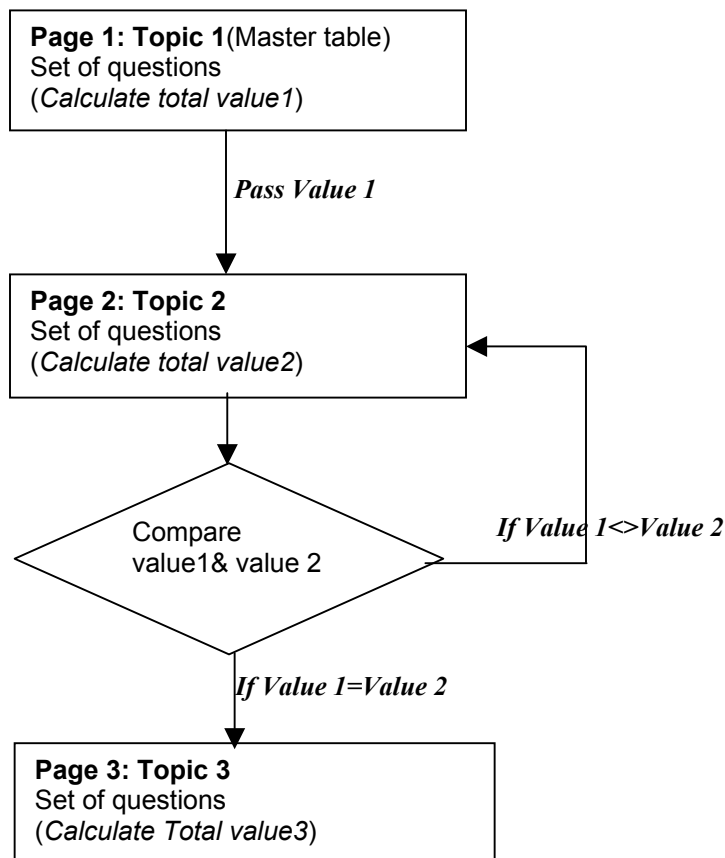
First, it reflects the minimum and dynamic display principle. Since this is an online questionnaire system, we want to take the advantage of the dynamic display capability and tailor the displayed material for each individual user. Different schools provide different numbers of degrees/programs. For each degree/program that a school provides,

the person entering data must answer questions on all of the 10 topics listed above. Using degrees/programs as division unit, we can dynamically display the questions just for the degrees/programs that a school provides.

In the opening page of the Students Questionnaire, users are shown the list of degrees/programs, and are asked to check all the degrees/programs their schools provide. This answer controls the number of times the user must iterate through the 10 topics. Users will only see the questions that they need to complete, while unrelated questions (questions regarding other degrees/programs) will be filtered out by the program.

The second principle this design illustrates is to support data integrity checking as efficiently as possible. As stated above, data integrity checking is required for the Students Questionnaire, to ensure that the various subtotals calculated for each specific degree/program provided by the schools agree with the totals given in the initial master table. With this design, for a specific degree/program users will go through the questions by topic. Totals can be calculated from data collected on a topic and compared to the total values collected on other topics (see the diagram below). Users will get instant feedback if the total for a specific topic is not consistent with the other totals, and be asked to check the data on that topic and make corrections.

Flowchart 1: Example for Data Integrity Checking



If we used topic as division unit instead of degree/program, we could not calculate the total values until we got to the last page of the questionnaire after all the data had been entered. When an inconsistency was found, we could not necessarily tell on what specific page the error(s) occurred, because one portion of each total would have been gathered on each page. It would be very hard to identify the errors for users.

4.3 The Faculty Questionnaire

The Faculty questionnaire contains 2 sections: one requests confidential information such as faculty age and salary, and the other requests non-confidential information. I

consulted with ALISE editor Dr. Jerry Saye, who recommended building a standalone, secure system for the confidential section to protect this sensitive data, which was considered as a separate project. Therefore this system only includes the non-confidential section, and the confidential section falls out of the scope of this system. It will be implemented in a later phase of the project.

In the non-confidential part, the first question on the paper questionnaire asks about the division of the academic year in semester, quarter or trimester, which is also the first question of the Curriculum Questionnaire. The duplication of the question in the paper format stems from the fact that the different questionnaires are designed and edited by different authors, and data collected are stored in different databases and analyzed independently. Since the division of the academic year interests both the authors of the Faculty Questionnaire and the Curriculum Questionnaire, it is addressed in both the questionnaires. In the design of the online questionnaire, since we have a single comprehensive back-end database, it is not necessary to duplicate the question.

The issue is then where the question should be placed. I consulted with the ALISE editors Dr. Daniel and Dr. Saye. After careful consideration and examination, we agreed to include the question in the Curriculum Questionnaire while dropping it from the Faculty Questionnaire. This decision was primarily based on the fact that the question is conceptually closer to the other questions of the Curriculum Questionnaire than to those in the Faculty Questionnaire.

The Faculty Questionnaire also contains derivative questions, which were discussed in section 4.1.3, however here we encountered a more complex situation: a three-level derivative question. Question 13 requests information about sabbatical leave.

*How many faculty at your school received sabbatical leave, or its equivalent, during **Academic Year 2001-2002**? _____*

*Check here if **no** such leaves are granted at your institution. ____*

*Please indicate the time and percentage of salary received by each faculty member on sabbatical leave during **Academic Year 2001-2002**. (e.g., one semester at 100%; a year at 50%).*

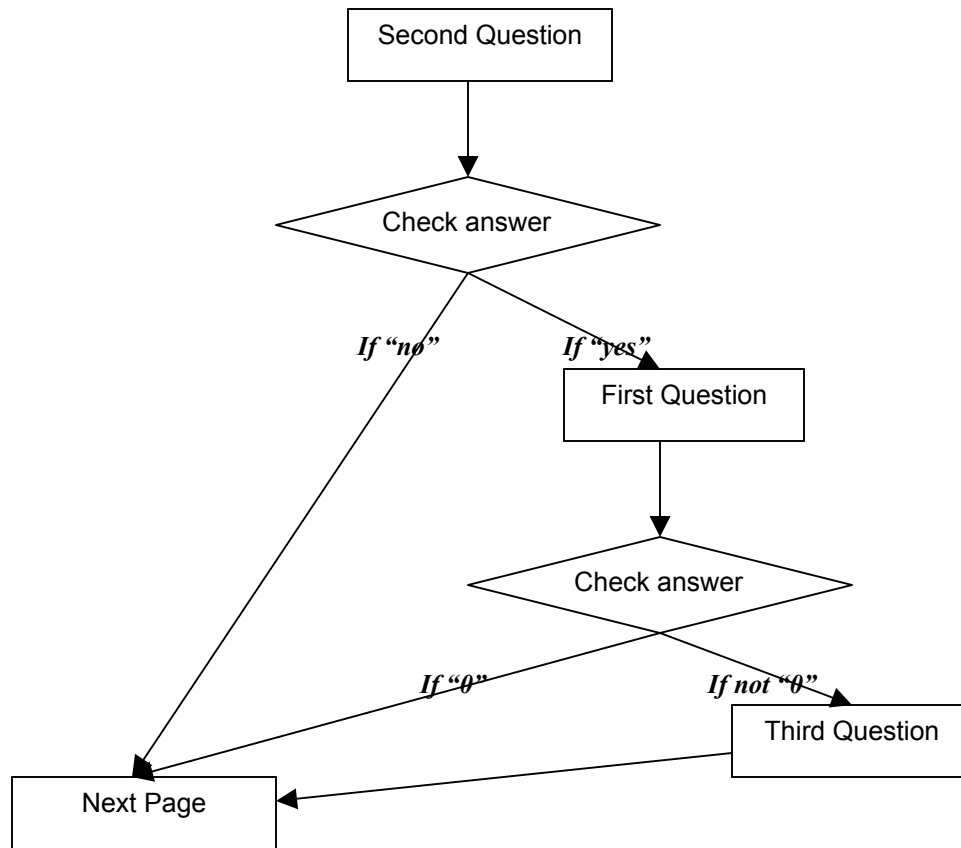
Length of time: _____ % of Salary: _____

Length of time: _____ % of Salary: _____

Length of time: _____ % of Salary: _____

This question is composed of three sub-questions. Careful examination reveals an internal relationship between the sub-questions. The second sub-question asks about the general existence of the sabbatical leave at the institution, while the first sub-question asks about the current situation. If the users' answer to the first sub-question is not "0", then the third sub-question will come into play. These relationships can be captured in the following structure.

Flowchart 2: Three-level Architecture of the Repeated Question



Based on the above analysis, I designed a three-level architecture to reorder the question display. Three pages were designed, each accommodating one sub-question. Users are asked the second question first. When they submit the data, the next page checks the answer to decide the flow of the program. If the answer is “yes”, users are given the first sub-question; otherwise, users are presented with Question 14 without going through the other parts of Question 13. The next level is handled similarly: if users enter a value other than “0”, users will be presented with the third sub-question; otherwise, they will be immediately directed to Question 14.

Again, this design reflects the minimum design principle for online material. It enables dynamic display based on each school's data, saves users' time and effort and helps decrease data entry errors.

4.4 The Curriculum Questionnaire

The Curriculum questionnaire is the most complex questionnaire of the whole questionnaire system in terms of the volume of data and the diversity of data types.

The most striking feature of the questionnaire is that the answers to the first 16 questions change little from year to year for most schools. For example, one question asks what the division of the academic year is used at the school's institution. To save users' efforts, the system displays data collected in the previous year, so that users just need to update if necessary. This is another advantage of the online version over the paper version, which requires the data to be entered every year. The remaining 9 questions were designed with the normal data submission structure.

Another feature of the Curriculum Questionnaire is that a large portion of the Curriculum data is collected based on the academic programs offered by the school, as in the Students questionnaire. Unlike the Students Questionnaire, however, the data collected for each program differs. Again, we designed a mechanism taking advantage of the dynamic display capability of the Web. In the Web version the programs a school offers determine the fields that will be displayed, based on the previous year's data. This saves users' time and effort, as well as reducing redundant fields. There is a tradeoff in this implementation: what happens if users have data for a program that they did not offer the year before? In implementing this mechanism I recognized this problem, but still I

decided on this design, because the primary assumption we make is that this part of data normally does not change. Generally speaking, this approach should benefit more users by saving their time and effort than it inconveniences the small number of users whose schools have started a new program.

To support those schools with a new program, an alternative way of entering data was provided. For the question regarding the programs, besides the number of blank fields that equal to number of programs school provided last year, an extra set of blank fields was designed to hold new information, which was not provided in the previous year. If a school starts up a new program, they can put the information for the new program in the blank field.

Figure 1: Example of New Program data submission

The screenshot shows a web browser window titled "Part 1, ALISE- Curriculum Questionnaire - Microsoft Internet Explorer". The address bar shows the URL: http://owl.ils.unc.edu/projects/ALISE_DB/pages/summaryCurr.asp?start=+Start+. The page content includes a navigation menu on the left with links for questions 1-16. The main content area is titled "Curriculum Questionnaire for NC Chapel Hill" and shows a progress indicator of "5/25 questions". Question 5 is displayed, asking to indicate if certificate programs are offered and whether they are degree-related. A table is provided for data entry:

Name/Area of Certificate	Degree Related	If yes, please state name of degree
SLM Coordinator	<input type="radio"/> Yes <input checked="" type="radio"/> No	CAS
	<input type="radio"/> Yes <input type="radio"/> No	

Below the table are "Submit" and "Reset" buttons. A "Comment" button is also present with the text "If you want to comment on any information you have entered above, click". The Windows taskbar at the bottom shows the Start button, the active window "Part 1, ALISE- Curriculu...", and the system tray with the time "10:28 AM" and "Local intranet" connection.

If the school starts up more than one program in a single year, users have to put this information as a comment in the comment field for this question. Chapter authors will check all the comments before they begin the data analysis; therefore this information will be picked up by the authors and included in the data analysis and the final report and then used to collect information for the new program next year.

4.5 The Income and Expenditure Questionnaire

The Income and Expenditure (I&E) Questionnaire has only one distinct feature: a repeated field question.

A repeated field question is a question for which there are possibly multiple parallel answers. Question C of the Income & Expenditure Questionnaire is a good example of a repeated field question.

ITEMS NOT INCLUDED IN THE LIS SCHOOL BUDGET

If the parent institution (and/or its library or computer service organization) furnishes services and materials or provides benefits without budget charges, these items should be listed here. DO NOT list general institutional services such as heating, ventilation or other maintenance costs unless they are specifically credited to the school's budget. Please specify item and amount:

<i>Item</i>	<i>Amount</i>

We cannot predict how many items a school will list. There are two major issues for this question. The first is how many repeated fields is a proper number to display on the interface, and the second is how to implement the update function for a page with repeated fields.

First, consider the “magic” number of the fields that needs to be displayed. Since we cannot predict how many fields each school needs, we followed the maximum design principle and showed as many fields listed as necessary to satisfy the maximum demand of the users. We chose 9, based on archives of data that schools submitted in the previous years.

The second issue was how to implement an update page that would handle the multiple possible update scenarios. With a repeated field question, the update scenarios include the following cases:

1. Edit existing records
2. Delete existing records
3. Add new records

A good mechanism should handle all these scenarios correctly and efficiently. One difficulty is that there is not a unique ID to identify each record. To efficiently handle all the above cases, we need to use the *loop* function in ASP to pull out all the relevant records in the database table in sequence. To implement the *loop* function, all the records in the table should have a unique sequential ID. The original design of the database used a computer-generated number to identify each record, which works fine for the creation of the table and subsequent access to individual records. But the generated number does not work well for this Web application, because it is automatically generated based on the

total number of records that have been generated, even if some of them have since been deleted. The ID of the records in the database table is therefore possibly not sequential. When using the *loop* function to pull out the records, we would encounter failure.

To solve the problem, I created a flag field in the table as the record ID. Unlike the automatically generated number, it is a field generated by the interface program. It is assigned every time when a new record was created and cleared when a record is deleted, thus ensuring that there is a sequential ID for the records in the table. With the help of the flag, we can easily pull out all the records from the database using the *loop* function and display them on the screen for further editing and deleting.

We also need to decide the number of blank spaces to provide for adding new records. On one hand, we want to make sure that users will have enough spaces for all the new records they want to add, on the other hand, we do not want to fill the page with unnecessary blank fields. After several rounds of testing, a simple but efficient mechanism was designed to solve the problem.

On the update scenario page there will always be only one blank field holding the extra input. The “one-line-extra design” was based on of the recommendation of the ALISE editor, Dr. Daniel. For most schools, one new item will be the normal case, if they have anything new to add. Thus, this design avoids unnecessary blank fields while satisfying most users’ needs.

The mechanism is also efficient, because it also works for the exceptional cases when users have more than one new record to add. Users enter one new record in the blank space and click the update button. The record will be added to the database. When users click the link to this page on the navigation panel of the update interface again, they will

find the list of records with the new added record and an extra blank line, which is ready for another new record. Users can keep adding records until all the records they want to add are added.

The advantage of the design is that it is relatively simple and efficient, and it can satisfy all the scenarios. It is a flexible design as well. The disadvantage of this design is that if users have more than one record to add, they cannot add them all at once. They must add them one by one. Design always involves balance and compromise between advantages and disadvantages. After careful examination of the data feature and overall evaluation of the mechanism we adopted this mechanism because the advantages outweigh the disadvantages.

The Income and Expenditure Questionnaire also contains derivative questions, which are handled in the same way as in the other questionnaires.

4.6 The Professional Continuing Education Questionnaire

The Professional Continuing Education Questionnaire is the smallest questionnaire in terms of data volume. It contains the same data types collected as in the other chapters. Question structures such as derivative questions and repeated fields questions are handled in the same way as in the other questionnaires.

4.7 Modifications to the database

Although the online questionnaire design was primarily based on the existing back-end database, there were still changes and modifications made to the database to support various features of the online questionnaires.

Additions. Since new features were needed in the implementation of the online system, there were corresponding additions made to the original database design. This primarily resulted in the addition of new tables. For example, in the original design of the database, there was no allowance for a comment mechanism, therefore there were no tables created to hold the comments. In implementing the comment mechanism, 5 new tables with the same structure were added, one for each for chapter: COMMENT_STUDENT, COMMENT_FAC, COMMENT_CURR, COMMENT_INCEXP, and COMMENT_CONTED.

On the paper questionnaire, there is a page at the beginning of each chapter asking for contact information, such as name, title, phone number, fax number and email, of the person who is responsible for completing the chapter. This helps the ALISE Report authors identify the source of the data when needed. In the original design of the database there was no table designed to hold these data. In consultation with the ALISE team, we agreed that this information was important and should be kept in the database. Therefore, a new table was created for this information.

Changes to collected data. Although the paper questionnaire is quite stable in terms of the data collected, there are nonetheless minor changes from year to year. The database was designed in spring 2001, based on the paper questionnaire of year 2000. Since then there have been two new versions of paper questionnaire: that of 2001 and that of 2002. The implementation of the online questionnaire was started in fall 2001. It was first based on the paper questionnaire of year 2001 and updated based on the 2002 version. For example, question 1.B in the Continuing Education Questionnaire originally included questions regarding credit activity (activities that gain credit hours) of “evening” and

“tutorial”, which were omitted from the questionnaire of year 2002. Therefore I deleted these two attributes in the table CONT_ED. There are also new attributes. For example, in the same questionnaire, there was a new category “International (outside country)” added to question 2 this year: Therefore it was also reflected in the database by the addition of a new attribute field “international”.

Changes to facilitate implementation. The database has also been modified to facilitate the implementation of the online system. The database was designed before the implementation of the online system, so some of the decisions hindered the implementation in certain ways. To facilitate the online implementations, three major aspects of the database have been modified.

First, all the questions in the paper questionnaire that start with *is*, *are*, *was*, *were*, *do*, *does*, or *did* were all originally designed as attributes with “text” as data type. This is a reasonable design for the database itself, but it is not the best way to support the ASP implementation of a radio box and a check box. Therefore I modified these attributes into “yes/no” (binary) data type, which will facilitate the online implementation.

Second, some variables were moved to new locations (tables). In the original design of the database, some data collected in the Students Questionnaire were stored in the CURRICULUM table, since they were also considered to be curriculum-related information. This design took the data relationships into consideration and was a good decision in terms of database design. However, it caused much trouble when I implemented the online system. When a user enters these data through the Students Questionnaire interface, I needed to store these data in the CURRICULUM table. There are two query commands for storing data in the database. One is *insert*, used when a new

record is entered for the first time. The other is *update*, used when the record is already in the database, but the values in some attribute fields of this record are changed. When we try to put data from the Students Questionnaire into the CURRICULUM table, the problem we face now is which query command we should use: If there is already a record in CURRICULUM table for this school, we would use *update*; if there is no record in CURRICULUM table for this school, we have to use *insert* to create a new record for the school. Since each questionnaire is an independent unit and is possibly completed by a different person, there is no definite sequence in which the questionnaires are completed. Therefore, we cannot tell whether users at a school will fill out the Students Questionnaire or the Curriculum Questionnaire first.

To solve this problem, I consulted with the ALISE team to determine the reason for entering these Students data into the CURRICULUM table. Since these data were also curriculum-related data, they may be needed by the author of the Curriculum Questionnaire when he/she is editing the Curriculum Report. However, since the data is now stored in a single comprehensive back-end database, Curriculum Report authors will be able to use these data, regardless of the table in which they are stored. Therefore, we agreed to move the data back to the Students Questionnaire table.

The third change made to support implementation concerned field sizes. In the original database, all the “number” data types were defined as *integer*. In the implementation of the online system I found that this did not properly reflect the data. In MS ACCESS, *integer* stores numbers from -32,768 to 32,767. In the questionnaire however, we often need numbers, such tuition and fees, income and expenditure items that are far greater than 32, 767. Therefore, I changed the field size of these numbers

from *integer* to *long integer*, which stores numbers from $-2,147,483,648$ to $2,147,483,647$.

5. Usability Study

A usability test was designed and conducted to gather feedback from users. The goal of the study was to identify specific problems that users of the system might have; in addition, this test evaluated the overall design and usability of the ALISE Statistical Report Online Questionnaire System.

5.1 Background

The usability test was conducted with the potential users of the system: schools and individuals (faculty and staff members) from these ALA-accredited schools. Two schools were chosen from the ALA-accredited Information and Library Schools. The selection of the schools was decided by the ALISE editors, Dr. Evelyn Daniel and Dr. Jerry Saye, and me. Representative features of the data sets were taken into consideration when schools were being selected; we also attempted to choose one school with relatively large and complex data set and one school with a comparatively simple data set.

After we contacted the selected schools and received consent from each school as well as each individual who would fill out the questionnaire, we sent an information package to each individual via email. The information package included:

- A cover letter
- A list of tasks
- A feedback form
- A survey

Please see Appendix F for the consent letter, Appendix G for the cover letter, Appendix H for the list of tasks, Appendix I for the feedback form, and Appendix J for the survey used in the usability test.

Each individual was requested to complete the following tasks within 5 workdays. They could work anytime at their convenience.

- They were requested to fill out the questionnaire with the data they collected for the year 2002 report.
- They were requested to write down any problems they encountered while filling out the questionnaire in feedback form.
- They were requested to complete the survey after they completed the questionnaire.

All participants successfully completed all tasks and all of them agreed that the design of the online system basically covers the functions needed in the data collection of the ALISE Statistical Report Questionnaire.

5.2 Data Analysis

As mentioned above, we requested that participants in the usability test to fill out the online questionnaire with the data for the year 2002 report. The reason we did that was that we had these data submitted by schools using the paper questionnaire. In this way, we could compare the data they submitted by the paper questionnaire and the online questionnaire to identify data entry errors and possibly the reasons behind these errors. After comparing these two data sets, I found that 2 errors that occurred were related to the repeated field questions: one in the Faculty Questionnaire and the other in the Curriculum Questionnaire. They were also from the same school, the school with a

comparatively large data set. After communicating with the people who entered the data, I found where the problems were. As described earlier, I designed the repeated field question interface with one extra line to hold the addition of new items. If schools have more than one record to add, they need to add them one by one. In both of the cases where the errors occurred, the participating school had more than one record to add. The users failed to fully complete the tasks because they did not understand how the mechanism worked. After I showed them how it worked, they had no problem completing the tasks. This indicates we needed to provide better instructions for this mechanism, which will be added in the next development phase.

Another error I found from comparing the two data sets concerned the FTE data. FTE means “full-time equivalence”, and is used on both the Students Questionnaire and the Faculty Questionnaire. *FTE students off campus* therefore refers to the full-time equivalence of students who attend classes off campus. *FTE of part-time faculty* refers to the full-time equivalence of part-time faculty. It was captured as an *integer* number data type in the database. The above-mentioned correction to *long integer* overlooked the fact that FTE could be fraction. Therefore, I changed the FTE related field data types to *real number* to solve the problem.

Finding this error instigated further close examination of the data, which revealed that most of the data types in the Income and Expenditure Questionnaire should also be *real number* instead of *long integer*. There was no discrepancy between the two data sets, because all the decimals for these items happened to be zeros. But from the data set of the paper questionnaire we could see that the schools did preserve two digits after the

decimal. Therefore, I changed all these data to *real numbers* in the database and in the implementation of the online questionnaire.

One of the complaints we received from the participants concerned the division of the two dimensional tables in the Students Questionnaire. As described in the Students Questionnaire section, we divided the tables by the dimension of degrees/programs. We made the decision because it reflects the minimum and dynamic display principle, it helps achieve the data integrity checking more easily, and it also reflects the database design. One of the participants from the schools with a large data set suggested that it would be better to divide the sections according to topics, because “this would be a more logical way of collecting data”. This is valuable feedback, for we realized this design had some drawbacks. However, any design decision requires balance and compromise between advantages and disadvantages. Dividing the sections according to topics would facilitate data entry for schools with large data sets; however, we would lose some advantages, for example, in calculating totals. At this point, we think that in the current design the advantages outweigh the disadvantages, however, this decision will be reviewed after more schools start to use the system.

6. Other Concerns

6.1 Network stability

The database and the server of the system reside on the SILS Web server; therefore, the performance of the Web server will greatly affect the performance of the system. According to experience, the Web server suffers occasional breakdowns during heavy

load periods. To provide users a stable system, we may want to suggest to users an optimal time period, when users can avoid traffic and smoothly complete their data entry.

6.2 Multiple online accesses

The Access database management system is not ideal for supporting multi-user server-side databases. Currently there are 56 schools participating in the project. Each school may have 1-5 LIS administrators entering the data, so the total number of users of the system is between 56 and 280. These users are required to complete the questionnaires within a two-month period. The maximum average usage of the system is therefore five persons per day. But considering that people tend to complete tasks right before the deadline, there exists the possibility that more than a dozen people will simultaneously access the system during the last few days. Therefore, I recommend the system be migrated to a larger scale database that can better support multi-user access such as SQL server or Oracle database. There are many conversion applications designed to convert MS ACCESS databases into larger databases, such as SQL Server or Oracle.

An alternative to migrating to a larger database management system, or a short-term solution, would be to adopt a rolling deadline for data submission to alleviate possible traffic jams.

7. Future Implementation Plans

For the current release of the system users need to fill out a chapter in one session and exit only when completing it. Considering the length of certain chapters, this could impose some inconvenience on users. This was the most frequent complaint voiced by

the participants in the usability study. In a future release, a new mechanism, which would enable users to interrupt filling out a questionnaire and resume the task later, would be desirable. To implement this mechanism, I recommend incorporating more JavaScript technology into the system. A good example of this mechanism is the online application system of Duke University (<http://www.gradschool.duke.edu/admissions/>; login is required for accessing the system). Figure 2 shows a screenshot of the interface.

Figure 2: Screenshot for Interface of Duke Online Application System

The screenshot displays the Duke University Graduate School online application system interface within a Microsoft Internet Explorer browser window. The page title is "Duke University Graduate School | Christine Jennings". The browser address bar shows a URL with parameters: "packageAnswerID=1648250&AYID=78821580-98E9-4668-99D0-CFA0087E1544&f=11&sn=Educational+Background&d=12%2F20%2F2002+1%3A00%3A47+PM".

The interface includes a navigation bar with links: "Application Home", "Tech Support", "Update Profile", and "Submit Application". There are also "main" and "logout" buttons. The main content area is titled "Educational Background" and contains the following text:

List your **complete educational history, showing first your undergraduate degree school.** Be sure you include **all institutions (undergraduate and graduate) which you have attended.**

NOTE: You must provide official, confidential transcripts. Essential to the review of your application will be transcripts from any institution where you earned (or will earn) a degree, studied for one year or more, or took classes that relate to your current application for graduate study. *You may be asked to furnish a transcript if the Graduate School deems that this document is important in the review of your file.*

Important: School information is recorded by school code. For the school code search of institutions in the U.S., use the state abbreviation. For international schools, use the country code abbreviations found in [About Transcripts](#).

When searching for your school code using the Look Up button, do not place any alpha characters in the Look Up response box. Finding the correct code(s) for all schools attended will speed up the processing of your application.

The form includes a section for "1. Undergraduate Degree School" with a "Look up" button and input fields for "School Code", "Name of Institution", and "City". There is also an "Important: See instructions" link.

The left sidebar contains navigation links: "Application Instructions", "Application to Admission Year 2003-2004", "Personal Information", "Citizenship", "Application Information", "Educational Background", "Grades and Scores", "Background Information", "Employment Information", "Courses In Progress", "Languages", "Activities and Achievements", "Statement of Purpose and Educational Objectives", "Additional Information", "Recommendations", "Downloadable Forms", and "Check your Application". There is also a "print application" button.

The bottom of the browser window shows the Windows taskbar with the Start button, several open applications (Telnet, DATA (D:), Microsoft Word, Duke University Gr..., Duke University Grad..., Acrobat Reader), and the system clock showing 1:12 PM.

Users can access the system multiple times with a valid user ID. Every time users enter the system, they can choose information to fill out from the navigation bar on the

left. After they fill out the information, they can save the information entered. They can access each content Web page multiple times for update. When users finish the whole package and are ready to submit, they click the submit button at the top of the page and the entire information package is sent to the back-end database. This approach would satisfy our needs for the save function. However, we cannot simply copy this system, for in our case we also need to consider more complex needs: when to calculate the total values, how to control the data integrity, and so on. This will be a major challenge for the next release of the system.

Another important future feature requested by the schools' Deans is a summary form with all information from each chapter, so that users can make a copy of it before they submit the data. Currently, schools use the full copy of the document in both electronic and paper form on a regular basis throughout the year. Even with the online system, and information from the database available to them on the Web, they still hope to keep a copy of all the data they submitted for later use. The summary feature will also fulfill another of the Deans' requirements. Currently, schools' Deans will check over the information in hard copy and give approval before it is sent to the ALISE editors. If the system provides a summary feature, Deans can check it over as they do in the current procedure. The Duke University application system also provides a good example of this mechanism, whose print function, prints in two formats: HTML and Adobe Acrobat PDF.

8. Conclusion

This project was the second phase of ALISE Statistical Report Online Questionnaire System. In the first phase, the backend Access database and a prototype of the interface

were designed. The goal of this phase was to design and implement a comprehensive web-based database-driven questionnaire system to automate the process of data collection of the entire set of questionnaires. This paper has documented the design and completion of the above projects components.

8.1 The Next Phase

The goal of the next phase is to add features that are essential for the system, but have not yet been implemented, test the system and finally deploy the system. To assist in the next phase of development, a development plan has been provided below. It lists the major tasks yet to be completed in the order it is recommended they be carried out.

1. Add instructions for the users, such as how to use the repeated field update scenario to add more than one item which was discussed in 5.2.
2. Design the print and save functions.
3. Internal testing. Test the above new functions and their integration with the existing functions and mechanisms. This can be conducted by the system developer(s).
4. Usability test. Conduct a second usability test with more schools (10-15 schools) to get more feedback from the users and use this feedback to further improve the interface.
5. Deploy the system. Use the system to collect data. This can be done in two phases. During the first phase, the paper questionnaire will still be available, and users can choose from the two formats to submit their data. This phase will last about 2-3 years. The ALISE team considers that 2-3 years is a reasonable transition period. During this period, the team will continue collecting feedback and making modifications to

- the system. After the transition period, the system will be mature and users should be accustomed to the online system. The paper format will be eliminated and the users will be required to use the online system.
6. Data migration. If multi-user access becomes a problem due to the limitation of the Microsoft Access, as described in section 6.2, data migration to a large scale database is recommended. Normally when more than 20 users access the system at the same time, the Access database will not be able to support the load. Users' access will be denied. Although this task is listed at the end of the task list, it should be implemented as soon as it seems that access is becoming a problem.
 7. Regular maintenance. Conduct regular maintenance of the system such as updating the interface when questions are added or changed.

8.2 Lessons learned

The most important thing I learned from this project was to study and understand the data that the system was intended to collect. Throughout the course of this project, some difficult design issues were encountered, mostly relating to how best to design an interface that would collect the data correctly and efficiently. Understanding the types of data and patterns of data was vital to the design decision process. For example, the number data in the Income and Expenditure Questionnaire should be defined as *real number* instead of *long integer*. Otherwise users will experience system failure when submitting data.

There are three sources that I used to study data: the archive data, the ALISE team and the users.

In addition to the archive data and the ALISE team, users are a good source of information about the data. I did not talk much to users during the initial design of the system. But I do realize that if I had contacted users earlier and learned more from them, I would have had a better understanding of the data and designed a more efficient system. I gained valuable feedback from the users in my usability test. But the online questionnaire system is a complex system and the usability test we conducted with 2 schools was limited due to the small scale. To fully test the system, I recommend conducting a larger scale usability study with 10-15 schools. This should help identify additional problems and provide information to help make the system mature enough for final release.

Endnotes

1. Introduction, Association of Library and Information Science Education Statistical Report 2001. <http://ils.unc.edu/ALISE/2001/Introduction.htm>
2. Wolf (2001). The ALISE Project: Design of a Database and Online Prototype for Integration and Processing of Statistical Information.
3. Wolf (2001). p.7-8.
4. Wolf (2001). p.7-8.
5. Nielsen, Jakob. Ten Usability Heuristics.
http://www.useit.com/papers/heuristic/heuristic_list.html
6. ALISE Statistical Report Questionnaire for Fall 2002. Continuing Education Questionnaire. P 6. <http://ils.unc.edu/ALISE/2003/questionnaire.html>

References

1. *Association of Library and Information Science Education Statistical Report 2001*.
<http://ils.unc.edu/ALISE/2001/Introduction.htm>
2. *ALISE Statistical Report Questionnaire for Fall 2002*.
<http://ils.unc.edu/ALISE/2003/questionnaire.html>
3. Childs, Matt, Lomax, Paul and Petrusa, Ron. *VBScript in a nutshell*. Sebastopol, CA: O'Reilly & Associates, 2000.
4. Nielsen, Jakob. *Ten Usability Heuristics*.
http://www.useit.com/papers/heuristic/heuristic_list.html
5. Ullman, Chris. *Beginning ASP 3.0*. Birmingham, UK : Wrox Press, 1999.
6. Vander Veer, Emily A. *JavaScript for dummies, 3rd edition*. Foster City, CA: IDG Books Worldwide, 2000.
7. Wolf, Heather. *The ALISE Project: Design of a Database and Online Prototype for Integration and Processing of Statistical Information*. SILS Library, 2001.

Appendix 1: ALISE Students Questionnaire

ASSOCIATION FOR LIBRARY AND INFORMATION SCIENCE EDUCATION**STATISTICAL REPORT QUESTIONNAIRE 2002****PART II****STUDENTS**

Please complete the following contact information identifying the person completing this part of the Statistical Report. This will help if questions arise in interpreting the data. Please be sure to return this cover sheet with the questionnaire.

Name:	_____
Title:	_____
Phone Number:	_____
Fax Number:	_____
Email Address:	_____
University:	_____

If questions arise in completing this part of the questionnaire, or if you have comments on its content, please contact the author of this section:

Jerry D. Saye, Ph.D, Professor
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Jerry Saye will be in Ljubljana, Slovenia from October 5 to October 21.

If questions arise during that period please contact the Students chapter co-author:

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PART II: STUDENTS

Notes on Completing the Tables

Specific instructions for completing each table are located with the table. If questions arise please don't hesitate to contact Jerry D. Saye by email or telephone.

Schools that have more than one program of study (i.e., separate master's programs) are asked to report separately for the ALA-accredited library science master's program, any information science master's program whether accredited or not, but aggregate the students in other master's program(s) of study under *Other Master's*.

If your school offers a particular program of study but no students are enrolled in that program (or none graduated -- Table II-3), please report "0" in the tables rather than leaving the cells blank. If you offer a program but the data requested are not available, please report "-----" in the relevant cells of the table.

Because of the differences in programs among the various schools of library and information science, you are encouraged to include explanatory comments for any of the tables. Comments, subject to editing, will be included in the final report with the table to which they refer where possible.

Please note that for the final report totals will be forced. That is, the values entered in the body of the table will be considered correct and these internal values will be used to total the table. Please check your responses for arithmetic accuracy and cross-check your values with those entered in related tables, as noted later in the instructions.

**Table II-1
Student Enrollment by Program and Gender**

<i>Program</i>	<i>Full-Time</i>			Part-Time						Total No.	Total FTE
				Male		Female		Total No.	Total FTE		
	Mal e	Femal e	Tot al	No.	FT E	No.	FT E				
Bachelor's											
ALA- Accredited Master's -- Library Science											
Master's -- Information Science*											
Other Master's Specify by degree name(s)											
Post- Master's											
Doctoral											
TOTAL											

Other Undergraduat e											
Other Graduate											

Of the **TOTAL** FTE, indicate the number of **FTE students off campus**: _____

Formula used for FTE calculations: _____

Table II-1 collects data on full-time and part-time enrollment, both head count and FTE, total head count and FTE data, as well as the distribution by gender of these students, for each program level.

Please report data for students officially enrolled in **Fall 2002**.

To report the number of students enrolled in each program, use your parent institution's method for computing student full-time equivalence (FTE). If such a formula is not available, use the following: Consider a student full-time if the course load will enable requirements for the degree to be completed within the normal length of time. For example, if the normal time to complete the degree is 12 courses in 4 quarters, a student carrying 3 courses during the quarter should be counted as 1.00 FTE; a student carrying 2 courses during the quarter should be counted as 0.67 FTE ($2/3 = .667$). Students carrying an overload should be counted as only 1.00 FTE. In the space below, continue on the back if necessary, please supply the formula you used to compute the FTE. If the FTE formula is differs by program level please give each formula used and the program level with which it is associated.

* Definitions for each program category are given on p. 4.

Program Definitions¹

Bachelor's: Include here only those students who are working toward a bachelor's degree in library and information science, regardless of whether offered on or off campus. **Do not include** students taking courses as cognate or service courses. Report them as “Other Undergraduate.”

ALA-Accredited Master's -- Library Science: Include here only those students working towards a **separate** master's degree in library science **or a combined** library and information science degree **accredited by ALA**, regardless of whether offered on or off campus. **Do not include** students taking courses as cognate or service courses. Report them as “Other Graduate.”

Master's -- Information Science: Include here only those students working towards a separate master's degree in information science, **whether accredited by ALA or not**. Include students taking course on or off campus. **Do not include** students taking courses as cognate or service courses. Report them as “Other Graduate.”

Other Master's: Include here those students working towards a separate master's degree **other than the ALA-Accredited Master's -- Library Science or Master's -- Information Science (either ALA-accredited or not)** offered by your school, regardless of whether offered on or off campus. **Do not include** students taking courses as cognate or service courses. Report them as “Other Graduate.”

Post-Master's: Include here only those students who are working toward a post-master's degree or certificate in library and information science, regardless of whether offered on or off campus. **Do not include** students taking courses as cognate or service courses. Report them as “Other Graduate.”

Doctoral: Include here only those students who are working toward a doctoral degree in library and information science, regardless of whether offered on or off campus. **Do not include** students taking courses as cognate or service courses. Report them as “Other Graduate.”

Other Graduate: Include here students taking library and information science courses as cognate or service courses or for professional development, regardless of whether offered on or off campus.

Other Undergraduate: Include here students taking library and information science courses as cognate or service courses for undergraduate credit, regardless of whether offered on or off campus. **Do not include** students who are in an established undergraduate program in library and information science.

¹ In these definitions the terms “library science” and “information science” should be interpreted in their broadest sense. Thus, these terms would also apply to degrees in library service, library studies, information studies, information systems, etc.

Table II-2
Number of Courses by Number of Students Enrolled

Course enrollment	1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40	41-45	46-50	>50
Number of Courses or Sections of Courses											

Total number of students enrolled in **independent study or reading courses**: _____

If there is an entry in the >50 column, please comment at the bottom of this page.

Table II-2 collects data on course enrollments.

Please report data for students officially enrolled in **Fall 2002**.

Do not include independent studies or individual reading courses in the table. Enter them **only** in the space provided below the table.

**Table II-3
Degrees and Certificates Awarded by Gender and Ethnic Origin**

Male

Program	AI	AP	B	H	W	I	NA	TOTAL
Bachelor's								
ALA-Accredited Master's -- Library Science*								
Master's -- Information Science*								
Other Master's Specify by degree name(s)								
Post-Master's								
Doctoral								
<u>TOTAL</u>								

Female

Program	AI	AP	B	H	W	I	NA	TOTAL
Bachelor's								
ALA-Accredited Master's -- Library Science*								
Master's -- Information Science*								
Other Master's								
Post-Master's								
Doctoral								
<u>TOTAL</u>								

Table II-3 collects data on the number of graduates, as well as the gender and ethnic origin or international student status of these graduates, for each program of study.

Please report data for degrees and certificates awarded in the **2001-2002 academic year (Fall 2001 through Spring 2002 and the 2002 summer sessions)**. US schools should supply breakdowns by ethnic group; Canadian schools may supply breakdowns if these data are available. All schools should supply totals.

Please note that **international students** should be reported only in the "I" column and not in any of the ethnic categories. The ethnic category columns are limited to reporting of students who are US. (or Canadian, for Canadian schools) citizens, permanent residents, or landed immigrants.

Use the five categories of ethnic origin defined by the US Department of Labor given on p. 7.

* Use the program levels defined on p. 4.

Ethnic Origin Definitions

- AI** American Indian or Alaskan Native -- a person having origin in any of the original peoples of North America, and who maintains cultural identification through tribal affiliation or community recognition.
- AP** Asian or Pacific Islander -- a person having origin in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands. This area includes, for example, China, Japan, Korea, the Philippine Islands, Samoa, and Taiwan. The Indian subcontinent includes the countries of India, Pakistan, Bangladesh, Sri Lanka, Nepal, Sikkim, and Bhutan.
- B** Black, not of Hispanic Origin -- a person having origin in any of the black racial groups of Africa.
- H** Hispanic -- a person of Cuban, Central or South American, Mexican, Puerto Rican, or other Spanish culture or origin, regardless of race. Only those persons from Central and South American countries who are of Spanish origin, descent, or culture should be included in this category. Persons from Brazil, Guyana, Surinam, or Trinidad, for example, would be classified according to their race and would not necessarily be included in the Hispanic category. In addition, the category does not include persons from Portugal, who would be classified according to race.
- W** White, not of Hispanic origin -- a person having origin in any of the original peoples of Europe, North America, or the Middle East.

In addition:

- I** International students -- all students who are not U. S. (or Canadian, for Canadian schools) citizens, permanent residents, or landed immigrants.
- NA** Information not available. Please use this category sparingly. Where at all possible, report ethnicity.

**Table II-4
Enrollment by Gender and Ethnic Origin**

Male

Program	AI	AP	B	H	W	I	NA	TOTAL
Bachelor's								
ALA-Accredited Master's -- Library Science*								
Master's -- Information Science*								
Other Master's								
Post-Master's								
Doctoral								
<u>TOTAL</u>								

Female

Program	AI	AP	B	H	W	I	NA	TOTAL
Bachelor's								
ALA-Accredited Master's -- Library Science*								
Master's -- Information Science*								
Other Master's								
Post-Master's								
Doctoral								
<u>TOTAL</u>								

Table II-4 collects enrollment data, as well as the distribution by gender and the ethnic origin or international student status of these students, for each program level.

Please report data for students officially enrolled in **Fall 2002**. U. S. schools should supply breakdowns by ethnic group; Canadian schools may supply breakdowns if these data are available. All schools should supply totals. Please note that **international students** should be reported only in the "I" column and not in any of the ethnic categories. The ethnic category columns are limited to reporting of students who are US. (or Canadian, for Canadian schools) citizens, permanent residents, or landed immigrants.

(continued on next page)

Table II-4
Enrollment by Gender and Ethnic Origin (continued)

Use the five categories of ethnic origin defined by the US Department of Labor given on p. 7.

* Use the program levels defined on p. 4.

*Note: Please check the totals for each program level in this table and the numbers reported for each gender against the numbers reported for the same levels in **Table II-1**. If the totals do not agree, please explain below. Please also check to ensure that the number of international students reported agrees with the number reported later in **Table II-6** and **Table II-7**.*

Table II-5
Number of In-State/In-Province and Number of
Out-of-State/Out-of-Province Students Enrolled

Program	<i>In-State/ Province</i>	<i>Out-of- State/ Province</i>	Not Available	TOTAL
Bachelor's				
ALA-Accredited Master's -- Library Science*				
Master's – Information Science*				
Other Master's				
Post-Master's				
Doctoral				
<u>TOTAL</u>				

Table II-5 collects data on the number of in-state/in-province and out-of-state/out-of-province enrolled students for each program level.

Please report data for students officially enrolled in **Fall 2002**. Figures reported should include **international students**.

* Use the program levels defined on p. 4.

*Note: Please check the totals for each program level in this table against the totals for the same levels in reported in **Table II-1** and **Table II-4** and later in **Table II-8**. If the totals do not agree, please explain below.*

Table II-6
International Students Enrolled by Program Level and Gender

Program	<i>Male</i>	Female	TOTAL
Bachelor's			
ALA-Accredited Master's -- Library Science*			
Master's -- Information Science*			
Other Master's			
Post-Master's			
Doctoral			
<u>TOTAL</u>			

Table II-6 collects data on the total number of international students enrolled, as well as their distribution by gender, for each program level.

Please report data for international students officially enrolled in **Fall 2002**.

* Use the program levels defined on p. 4.

*Note: Please check the totals for each program level and the number reported for each gender in this table against the totals for the same levels in the "I"(International) column of **Table II-4**. Please also check that the totals reported later in **Table II-7** agrees with the totals reported here. If the totals do not agree, please explain below.*

T O T A L							
-----------------------	--	--	--	--	--	--	--

Table II-7 collects information on the countries of origin of international students for each program level.

Please report data for students officially enrolled in **Fall 2002**.

If the country of origin for any international students is unknown please create a row for "Unknown" and enter the number of students for whom country of origin is unknown for each program level.

Use the program levels defined on p. 3. Please do not abbreviate the country name.

*Note: Please check the totals for each program level in this table against the totals for the same levels in **Table 6** and in the "I"(International) column of **Table II-4**. If the totals do not agree, please explain on the back of this page.*

**Table II-8
Students Enrolled by Age and Gender**

Male

Program	<20	20-24	25-29	30-34	35-39	40-44	45-49	50-54	>54	NA	TOTAL
Bachelor's											
ALA-Accredited Master's -- Library Science *											
Master's -- Information Science *											
Other Master's											
Post-Master's											
Doctoral											
<u>TOTAL</u>											

Female

Program	<20	20-24	25-29	30-34	35-39	40-44	45-49	50-54	>54	NA	TOTAL
Bachelor's											
ALA-Accredited Master's -- Library Science *											
Master's -- Information Science *											
Other Master's											
Post-Master's											
Doctoral											
<u>TOTAL</u>											

Table II-8 collects data on the age of enrolled students for each program level aggregated into age groups, as well as their distribution by gender, for each program level.

Please report data for students officially enrolled in **Fall 2002**. Supply ages as of **January 1, 2002**.

(continued on next page)

Table II-8
Students Enrolled by Age and Gender (continued)

* Use the program levels defined on p. 3.

*Note: Please check the totals for each program level in this table against the totals for the same levels in **Table II-1**, **Table II-4** and **Table II-5**. If the totals do not agree, please explain on the back of this page.*

Tables II-9 and II-10 are not currently in use.

**Table II-11
Scholarship and Fellowship Aid**

Program	Male		Female	
	Number Awarded	Total Value	Number Awarded	Total Value
Bachelor's				
ALA-Accredited Master's -- Library Science*				
Master's -- Information Science*				
Other Master's				
Post-Master's				
Doctoral				
<u>TOTAL</u>				

Are scholarships and fellowships awarded to part-time students? Yes No

Table II-11 collects data on the number of scholarships and fellowships awarded and the total value of those awards, as well as their distribution by gender, for each program level.

Please report data for students officially enrolled during the **2001-2002 academic year (Fall 2001 through Spring 2002 and the 2002 summer sessions)**. Base responses on aid awarded and accepted by students for the most recently completed **fiscal year**. The summer sessions for which information is recorded will depend on the starting date of your fiscal year. Include such awards as those administered directly through the school of library and information science, federal funds, awards made through the parent institution's funds, and awards made through the schools but from non-federal sources (such as the H. W. Wilson awards and tuition waivers). Exclude awards made directly to students from outside sources, assistantships, and work/study awards.

In the "Total Value" columns please report the total value of the awards reported in the "Number Awarded" cell to the left. If you have students enrolled in a particular program but made no scholarship or fellowship awards to those students please report "0" rather than leaving the cell blank.

* Use the program levels defined on p. 4.

**Table II-12
Assistantships**

Program	Male		Female	
	Number Awarded	Total Value	Number Awarded	Total Value
Bachelor's				
ALA-Accredited Master's -- Library Science*				
Master's -- Information Science*				
Other Master's				
Post-Master's				
Doctoral				
<u>TOTAL</u>				

Are assistantships awarded to part-time students? Yes No

Table II-12 collects data on the number of assistantships awarded and the total value of these assistantships, as well as their distribution by gender, for each program level.

Please report data for students officially enrolled in **Fall 2002**.

In the "Total Value" columns please report the total value of the awards reported in the "Number Awarded" cell to the left. If you have students enrolled in a particular program but made no assistantship awards to those students please report "0" rather than leaving the cell blank.

* Use the program levels defined on p. 4.

**Table II-13
Tuition and Fees**

Program	Full Degree		One Credit	
	In-State/ Province	<i>Out-of- State/ Province</i>	In-State/ Province	<i>Out-of- State/ Province</i>
Bachelor's				
ALA-Accredited Master's -- Library Science*				
Master's -- Information Science*				
Master's -- Other				
Post-Master's				
Doctoral				

Table II-13 collects data on the cost of obtaining a **full degree** and the cost for one credit for each of the program levels for both in-state/province and out-of-state/province students.

Report the total cost of a degree obtained without transfer credit. Figures should indicate tuition and fees in force as of **Fall 2002**. Exclude any fees for particular courses (such as computer usage) and any lab fees. For doctoral programs, show tuition and fees to cover course work only (i.e., exclude dissertation costs).

Tuition for one credit should reflect *tuition only* as of **Fall 2002**. Exclude all fees and any other charges. Please report only the cost for one credit even though your school has a minimum credit hour requirement greater than one credit. Please comment below about minimum credit requirements that exceed one credit.

* Use the program levels defined on p. 4.

Appendix 2: ALISE Faculty Questionnaire (Non-confidential)

ASSOCIATION FOR LIBRARY AND INFORMATION SCIENCE EDUCATION
STATISTICAL REPORT QUESTIONNAIRE 2002

PART I
FACULTY

Please complete the following contact information identifying the person completing this part of the Statistical Report. This will help if questions arise in interpreting the data. Please be sure to return this cover sheet with the questionnaire.

Name:	_____
Title:	_____
Phone Number:	_____
Fax Number:	_____
Email Address:	_____
University:	_____

If questions arise in completing this part of the questionnaire, or if you have comments on its content, please contact the author of this section:

Timothy W. Sineath
College of Library and Information Science
University of Kentucky
502 King Library Building, S.
Lexington, KY 40506-0039

Telephone: 859-257-8100
Fax: 859-257-4205
Email: tsineath@pop.uky.edu

PART I: FACULTY

1. Type of Academic Calendar in use in 2002-2003

Semester _____ Quarter _____

Trimester _____ Other _____

2. Full-Time Faculty: Fall 2002. In the following computation, include:

- 1) Full-time members of the school's faculty, including administrative persons holding academic rank (or equivalent), whose salaries were at least in part from the school's budget as appropriate;
- 2) instructional staff who gave full-time to the school, but whose salaries were paid from outside the school's budget (e.g., full-time faculty paid from the president's discretionary fund); and
- 3) faculty on leave if at least partial salaries were paid during the leave. "Visiting faculty," should be included here if they were full-time during the term specified. Persons who devoted only a portion of their time to instruction (including research and service), even though they held academic titles (e.g., a library science librarian who taught one course) should **not** be included here **but** among part-time faculty in question number 3. Do not include unfilled positions.

Full-time faculty

No.

Fall term 2002 _____

3. Part-time Faculty: Fall, 2002. In the following computation of part-time faculty include:

- 1) individuals who have had the **major share** of the teaching responsibility for at least one credit course in the school. If a doctoral student was engaged by the school to assume the major share of the teaching of a credit course, that person should also be considered part-time faculty for the purpose of this survey.
- 2) A faculty member with a joint appointment in the school should also be included here. "Adjunct faculty" are often practicing librarians (including retired persons) who teach an occasional course for the school - they should also be counted here.

The following **should not** be included as part-time faculty:

- 1) students who assist a regular faculty in the teaching of a course;
- 2) a technician in charge of a laboratory session for such courses as cataloging or media production;
- 3) a librarian who instructs students in the use of the library; and
- 4) a librarian who provides internships for library and information science students.

In computing the full time equivalent (FTE) of part-time faculty, the institutional formula for this purpose should be followed:

Part-time Faculty

	No.	FTE
Fall term 2002	_____	_____

Please provide the formula used to calculate FTE for part-time faculty:

4. What was the **average** percentage of salary improvement for your school's full-time faculty in **Academic Year 2002-2003**? _____

5. On what basis were the salaries of your school's full-time faculty increased in **Academic Year 2002-2003**?

(check **all** appropriate blanks)

Union Contract	___	Cost-of-living	___
Merit	___	Seniority	___
Across the Board (Without regard to merit)	___	To Achieve Equity	___
		Other (Please specify)	___

6. How many full-time faculty replacements (resulting from resignations, retirements, etc.) were made in your schools in **Academic Year 2001-2002**?

Please indicate below the **rank** of the individual/s who was/were replaced **and** the rank of the replacements, (e.g., "2 professors replaced by 1 associate and 1 assistant professor", etc.)

7. Indicate the number of unfilled, full-time faculty positions, for which funding was available, in your school in **Fall 2002**. _____

For each position, **please indicate rank and the reason why the position was not filled**. If the funding for these positions was used by choice or default to hire part-time faculty, still count them as unfilled, full-time faculty positions.

8. Were any full-time faculty positions **lost** in your school in **Academic Year 2001-2002**, because of reduction of funding for such salaries? (That is, were there faculty who retired, resigned, etc., before or during **2001-2002** who could not be replaced because funding for those positions was not available in **2001-2002**?)
-

If the answer is yes, please indicate the **number** and **rank** of each position lost?

9. Were additional (**new**) **faculty positions** with new or reallocated funding created in your school in **Academic Year 2001-2002**? (Note that this question pertains to **added positions** not to replacements) _____

If the answer is yes, please indicate **number** and **rank**.

10. What was the percentage value of faculty **salary fringe benefits** for **Academic Year 2002-2003**? (i.e., the financial worth of the institution's contribution to retirement, health insurance, etc.) (This percentage figure is usually required in grant applications where faculty salaries are to be covered).
-

11. How many specific individuals on your school's faculty, **excluding the dean or director**, received travel funds in **Academic Year 2001-2002 (includes Summer 2002)**? _____ **DO NOT** include here anyone who received travel funds exclusively to travel to teach in extension, distance learning, workshops, etc.
-

12. What was the **total amount of funding for professional travel** provided to and used by your faculty in **Academic Year 2001-2002 (includes Summer 2002)**? **Exclude travel by the dean or director**. (Funding, whether or not part of your school's budget, that was provided through your institution for this purpose should be included when calculating the answer.) **DO NOT** include here travel to teach in extension, distance learning, workshops, etc.
-

What was the average amount received in **Academic Year 2001-2002 (includes Summer 2002)** per faculty member (**excluding** dean or director) who received professional travel assistance? _____

13. How many faculty at your school received sabbatical leave, or its equivalent, during **Academic Year 2001-2002**? _____

Check here if **no** such leaves are granted at your institution. ____

Please indicate the time and percentage of salary received by each faculty member on sabbatical leave during **Academic Year 2001-2002**. (e.g., one semester at 100%; a year at 50%).

Length of time: _____ % of Salary: _____

Length of time: _____ % of Salary: _____

Length of time: _____ % of Salary: _____

14. **Support Staff.** Definitions for the following computations:

- (a) **Administrative support:** Secretarial and other assistance provided to the dean, assistant dean, etc., in the administration of the school.
- (b) **Instructional support:** Clerical and other assistance provided to faculty in their course preparation and teaching.
- (c) **Research assistance:** Secretarial and other support provided to the faculty in their research activity.
- (d) **Media Services:** Media technicians, graphic artists, and others who provide assistance in the production and use of non-print media.
- (e) **Library Personnel:** Librarians and library assistants who serve in the library and information science library, whether their salaries are paid from the school's budget or from that of the central library.
- (f) **Other:** Any support staff beyond those listed above.

Any individual working full-time who has also enrolled in a course or two should be listed below in **A**, not **B**.

A. Support staff provided to the school in its budget or by the central administration in **Fall 2002 (exclusive of part-time student assistance)**

- | | |
|-----------------------------|--|
| (a) Administrative support: | Full-time staff _____
FTE of part-time staff ____ |
| (b) Instructional support: | Full-time staff _____
FTE of part-time staff ____ |
| (c) Research assistance: | Full-time staff _____
FTE of part-time staff ____ |
| (d) Media services: | Full-time staff _____
FTE of part-time staff ____ |
| (e) Library personnel | Full-time staff _____
FTE of part-time staff ____ |

- (f) Computer lab support: Full-time staff _____
FTE of part-time staff _____
- (g) Other: Full-time staff _____
(Please specify) _____
FTE of part-time staff _____

B. Support staff provided in Fall 2002 through the use of student/graduate assistants who worked less than full-time.

- (a) Administrative support: _____ FTE
- (b) Instructional support: _____ FTE
- (c) Research support: _____ FTE
- (d) Media services: _____ FTE
- (e) Library personnel: _____ FTE
- (f) Computer lab support: _____ FTE
- (g) Other: _____ FTE
(Please specify) _____

Appendix 3: ALISE Curriculum Questionnaire

ASSOCIATION FOR LIBRARY AND INFORMATION SCIENCE EDUCATION**STATISTICAL REPORT QUESTIONNAIRE 2002****PART III****CURRICULUM**

Please complete the following contact information identifying the person completing this part of the Statistical Report. This will help if questions arise in interpreting the data. Please be sure to return this cover sheet with the questionnaire.

Name:	_____
Title:	_____
Phone Number:	_____
Fax Number:	_____
Email Address:	_____
University:	_____

If questions arise in completing this part of the questionnaire, or if you have comments on its content, please contact the author of this section:

Daniel D. Barron
College of Library and Information Science
113 Davis College
University of South Carolina
Columbia, SC 29208

Telephone: 803-777-4825
Fax: 803-777-7938
Email: dan.barron@sc.edu

PART III: CURRICULUM

Report information based on 2001-2002 academic year (Fall 2001 through Summer 2002) [NOTE: If there is no change in the response to a particular question from the response for last year, you may simply initial next to the question number and move on to the next question.]

Please remember to send 2 copies of your school's current catalog or course listings with your completed questionnaires.

1. What is the division of your academic year, and how many weeks are included in a regular term?
 - a. _____ semester _____ quarter _____ trimester
 - b. number of weeks _____

2. How many terms are there in your summer session, and how many weeks are there in each term?
 - a. number of terms _____
 - b. number of weeks per term _____

3. How many hours per week must a student be in class to earn one hour of academic credit?
 - a. regular term _____ hrs.
 - b. summer session _____ hrs.

4. How many credit hours or courses (please specify) are required for each of the following programs? **If you offer more than one master's degree, please include the title and number of hours/courses for each.**
 - a. undergraduate library science/services: major _____ minor _____
 - b. undergraduate information science/systems: major _____ minor _____

- c. master's degree(s): *(hereafter designate master's degree (1) and master's degree (2), etc.)*¹

(1) Title: _____ No. of Hours:

(2) Title: _____ No. of Hours:

¹ *If your school offers more than 2 master's degree, indicate the title and number of hours for master's degree(3), (4) ... on the reverse of this sheet.*

- d. joint master's degree(s)²:

(1) Title: _____ No. of Hours:

(2) Title: _____ No. of Hours:

² *If your school offers more than 2 joint master's degree, indicate the title and number of hours for joint master's degree(3), (4) ... on the reverse of this sheet.*

- e. post master's degree: _____

- f. doctoral: _____

5. Please indicate if you offer certificate programs and whether or not they are degree-related (i.e., certificate not awarded without degree being awarded at the same time).

<u>Name/Area of Certificate degree</u>	<u>Degree Related</u>	<u>If yes, please state name of</u>
_____	___ yes ___ no	_____
_____	___ yes ___ no	_____
_____	___ yes ___ no	_____

6. If you offer joint degree programs, please indicate below (1) the academic unit with whom you cooperate, (2) the number of hours students must take in that unit, and (3) the number of hours in your program.

<u>Other unit</u>	<u>Hours in other unit</u>	<u>Hours in your program</u>
_____	_____	_____
_____	_____	_____

7. Does your school accept students on a part-time basis in any of the following programs?

- a. undergraduate _____yes _____no
- b. master's³
- (1) _____yes _____no
- (2) _____yes _____no

³ If your school offers more than 2 master's programs, report the information as (3), (4),
...
in the space below or on the reverse side of this sheet.

- c. post-master's _____yes _____no
- d. doctoral _____yes _____no

8. Does your school require a residency on your home campus in the following programs and, if so, how many hours?

- a. undergraduate _____yes _____no _____hrs.
- b. master's⁴
- (1) _____yes _____no _____hrs.
- (2) _____yes _____no _____hrs.

⁴ If your school offers more than 2 master's programs, report the information as (3), (4),
...
in the space below or on the reverse side of this sheet.

- c. post-master's _____yes _____no _____hrs.
- d. doctoral _____yes _____no _____hrs.

9. What are the minimum (in months) and maximum (in years) times possible for the completion of your degree program(s)?

		<u>Minimum</u>	<u>Maximum</u>
a.	master's ⁵		
	(1)	_____ months	_____ years
	(2)	_____ months	_____ years
<i>⁵ If your school offers more than 2 master's programs, report the information as (3), (4), ... in the space below or on the reverse side of this sheet.</i>			
b.	post-master's	_____ months	_____ years
c.	doctoral	_____ months	_____ years

10. How many hours of required course work must be taken by all students, regardless of declared or eventual specialization, in each of your programs?

a.	master's ⁶	
	(1)	_____ required hours
	(2)	_____ required hours
<i>⁶ If your school offers more than 2 master's programs, report the information as (3), (4), ... in the space below or on the reverse side of this sheet.</i>		
b.	post-master's	_____ required hours
c.	doctoral	_____ required hours

11. A. Are students permitted to exempt any required courses?

a.	master's ⁷	
	(1)	_____ yes _____ number of hours
		_____ no
	(2)	_____ yes _____ number of hours
		_____ no

⁷ If your school offers more than 2 master's programs, report the information as (3), (4), ...

in the space below or on the reverse side of this sheet.

b. post-master's _____yes _____number of hours
 _____no

c. doctoral _____yes _____number of hours
 _____no

is B. If you permit exemptions, please indicate the basis on which an exemption granted. Please check all that apply.

a. written exam _____

b. transcript from another school _____

c. approval of advisor/instructor _____

d. other (please specify) _____

number C. If you permit exemptions, does the student receive credit for them? (i.e., of hours required for the degree reduced in proportion)

a. master's _____yes _____no

b. post-master's _____yes _____no

c. doctoral _____yes _____no

12. A. What is the maximum number of hours that a student may transfer from another program into your program. Exclude exemptions.

a. undergraduate major _____hours

b. master's⁸
 (1) _____hours
 (2) _____hours

⁸ *If your school offers more than 2 master's programs, report the information as (3), (4), ...
 in the space below or on the reverse side of this sheet.*

c. post-master's _____hours

d. doctoral _____hours

- B. Do you permit transfer credit from library/information science education programs that are not ALA accredited? ___yes ___no

If yes, are there any special circumstances or requirements?

13. Is a thesis (paper, study) required or an option in your program(s)? How many credit hours may be earned for the thesis?

- a. master's⁹
 (1) ___none ___required ___optional
 ___hours
 (2) ___none ___required ___optional
 ___hours

⁹ If your school offers more than 2 master's programs, report the information as (3), (4),
 ...
 in the space below or on the reverse side of this sheet.

- b. post-master's ___none ___required ___optional
 ___hours
 c. doctoral ___none ___required ___optional
 ___hours

14. Do you offer field work (i.e., supervised work experience for academic credit) as a part of your program(s)? If yes, please indicate the number of hours which may be earned.

- a. master's¹⁰
 (1) ___none ___required ___optional
 ___hours
 (2) ___none ___required ___optional
 ___hours

¹⁰ If your school offers more than 2 master's programs, report the information as (3), (4),
 ...
 in the space below or on the reverse side of this sheet.

- b. post-master's ___none ___required ___optional
 ___hours
 c. doctoral ___none ___required ___optional
 ___hours

If variable credits are an option, please explain the circumstances:

15. Please indicate other special requirements for graduation.

	<u>Comp Exam</u>	<u>Language</u>	<u>Other¹²</u>
a. master's ¹¹			
(1) ___yes ___no	___yes ___no	___yes ___no	___yes
___no			
(2) ___yes ___no	___yes ___no	___yes ___no	___yes
___no			

¹¹ If your school offers more than 2 master's programs, report the information as (3), (4), ...in the space below or on the reverse side of this sheet.

b. post-master's	___yes ___no	___yes ___no	___yes
___no			
c. doctoral	___yes ___no	___yes ___no	___yes
___no			

¹² If you have checked yes for an "other" requirement, please specify below what that requirement is and to which degree(s) it pertains.

- (A dissertation is assumed to be required for all doctoral programs. If this is **not** true for your program, please indicate that and what other requirement is put in its place.)
-

16. Do you have prerequisites for entering your master's program(s)? (Please check all that apply)

**Prerequisite
Master's(2)¹³**

Master's(1)

Library or information-related work experience

¹⁴ Please use the following category list for the media or service delivery mechanism. In cases where more than one mechanism is used, use the category that is used most frequently.

Off-Campus	Regular or adjunct faculty-offered course at a location off campus
Video	Course delivered in video format and cassette mailed to student
Internet	Includes computer conferencing, computer tutorial, electronic mail, web-based, WebCT
	or Blackboard or other authoring system, and the like.
Hybrid Multimedia	Combination of several formats and methods of delivery.
TV Delivery	Course delivered via live television (broadcast, cable, or satellite)
Other	Please specify

B. How were regular faculty compensated for teaching these courses?

- a. within the regular teaching load _____
- b. as an overload _____
- c. other compensation (please specify) _____

18. Do you expect to change any aspects of your distance education efforts within the next report period?

_____yes _____no

If yes, please indicate what the change is expected to be.

19. What is the regular teaching load of full-time faculty teaching graduate courses in your department? Indicate courses in *semester*, *trimester*, or *quarter* credit hours. Circle the appropriate unit.

- a. _____ credit hours teaching per academic year (except summer)
- b. _____ credit hours in summer session
- _____required to teach _____optional to teach
- c. _____ maximum credit hours a faculty person may teach as an overload. If no overload permitted, please indicate 0.
- d. Is the regular teaching load for full-time faculty teaching undergraduate courses in your department any different?

_____yes _____no If yes, how does it differ?

20. A. How many courses were listed in your catalog during the last report period? _____

B. What percent of those courses were taught at least once during the last report period? _____%

21. How many of the required and elective courses taught on your home campus were taught by regular faculty and how many of them were taught by adjunct faculty?

	<u>Required Courses</u>	<u>Elective Courses</u>
a. regular full-time faculty	_____	_____
b. adjunct faculty	_____	_____
c. other (please specify)	_____	_____

22. A. To what extent are courses in your catalog cross-listed with other departments with the major teaching responsibility carried out by **your** department?

<u>Course(s) by Title</u>	<u>Other Departments</u>
_____	_____
_____	_____
_____	_____

B. To what extent are courses in other departments cross-listed with your catalog with the major teaching responsibility carried out by the **other** department(s)?

<u>Course(s) by Title</u>	<u>Other Departments</u>
_____	_____
_____	_____
_____	_____

23. Please indicate curriculum changes made within your program during the period from the Fall of **2001** through the Summer of **2002**.

a. new courses added (Indicate titles below and reason for adding)

b. courses dropped (Indicate titles below and reason for dropping)

c. new program(s) added (indicate the title(s) and degree below)

d. Did you do total curriculum review of any program(s) (Indicate name of program)

e. Did you do a total curriculum revision of any degree(s) (Indicate name of degree)

f. Were there specific areas within the curriculum reviewed? (specify below)

g. Were there specific areas within the curriculum revised? (specify below)

h. Were there any courses taught on an experimental or trial basis? (specify below)

i. Were there other changes? (specify below)

24. Do you have a standing curriculum committee within your school?

_____yes (please complete A and B) _____no (please go to B)

A. Please indicate the composition of your committee (check all that apply)

faculty _____ staff (specify)_____ students_____

alumni _____ practitioners_____ other (specify)_____

B. Was anyone given released time or other compensation for curriculum or curriculum revision activities during the last report committee period?

_____yes rank or position of person _____

_____no % of time or compensation _____

25. Are there curriculum changes under serious/active consideration?

_____no _____yes (please specify and comment briefly on the change)

_____a. changes in core/required courses (specify)

_____b. adding a sixth-year or post-master's program

_____c. adding a doctoral program

_____d. changing the length of a master's program (specify)

_____e. adding a second (or third) master's program
(specify)

_____f. joint master's program (specify area/department)

_____g. other changes (specify)

Appendix 4: ALISE Income and Expenditure Questionnaire

ASSOCIATION FOR LIBRARY AND INFORMATION SCIENCE EDUCATION**STATISTICAL REPORT QUESTIONNAIRE 2002****PART IV****INCOME AND EXPENDITURE**

Please complete the following contact information identifying the person completing this part of the Statistical Report. This will help if questions arise in interpreting the data. Please be sure to return this cover sheet with the questionnaire.

Name:	_____
Title:	_____
Phone Number:	_____
Fax Number:	_____
Email Address:	_____
University:	_____

If questions arise in completing this part of the questionnaire, or if you have comments on its content, please contact the author of this section:

John N. Olsgaard
College of Library and Information Science
113 Davis College
University of South Carolina
Columbia, SC 29208

Telephone: 803-777-2808
Fax: 803-777-7938
Email: jo@gwm.sc.edu

PART IV: INCOME & EXPENDITURE

The questionnaire on Income & Expenditure includes three sections:

- A. Expenditures;
- B. Sources of Funds;
- C. Items Not Included in the LIS School Budget.

For Sections A (Expenditures) and B (Sources of Funds), *please include only figures for items that are part of the LIS school budget, over which the school has direct control. Both summer session and academic year budgets should be included.* Salaries, services, and materials provided without budget charge by the parent institution should be listed in Section C. Please review all categories of information requested before answering.

Reporting Period. (Please use and indicate the 12-month period which includes the **2001-2002** academic year):

_____ through _____
 (Month) (Year) (Month) (Year)

A. EXPENDITURES

1. Salaries and Wages

Please record in column (01) the total amount spent for each category of personnel. Then indicate how much of the amount spent for each category is allocated (actual or estimated in dollars) to each of the six activities designated in the right-hand columns [(02) - (07)].

<i>PE</i> <i>PERSONNEL</i>	TOTAL SPENT (01)	<i>Amount Allocated (Actual or Estimated) to Each Activity</i>					
		Instruction (02)	<i>Adm inistration (03)</i>	Library (04)	Computer Lab (05)	Research (06)	Other* (07)
a. Faculty*							
b. Specialist*							
c. Clerical							
d. Students							
e. Fringe Benefits**							
<u>CO</u> <u>LU</u> <u>MN</u> <u>TO</u> <u>TA</u> <u>LS</u>							

The total in Column 1 should equal the sum of the totals in Columns 2, 3, 4, 5, 6 and 7:
 $(01) = (02) + (03) + (04) + (05) + (06) + (07)$

* See top of page 2 of this section for definition of terms.

** Total of fringe benefits, if NOT already included in a-d above.

**Definitions of Terms

Faculty:

This category includes all individuals in the educational program who hold the title of lecturer, instructor, or professor (all levels), including those with titles preceded by the term “visiting”, “adjunct”, “clinical”, or any other designation. This category would normally include program deans or directors unless they do not hold professorial rank. In allocating the funds spent for faculty, salaries, administrative or research activities that are considered to be a normal responsibility of teaching faculty (e.g., committee work, unfunded research) should not be prorated unless individuals have been given specific release time for such work; otherwise, faculty salaries should be listed entirely under “Instruction”. Student teaching assistants and other graduate assistants funded by the library school SHOULD BE included here and NOT be included under Student Aid, A.2.d.ii.

Specialists:

This includes all LIS school staff members who serve in support activities such as librarians, technology specialists, laboratory technicians, administrative assistants, publication program directors, editors, placement officers, admissions officers, and other personnel.

Other Activities:

This includes specially funded workshops and institutes not part of the normal teaching efforts, separate from the library, computer lab(s), publication programs, and other services.

2. **Operating Expenses**

(A) Teaching and Administration (*Report library and computer labs separately if funded by the School in Sections B and C below*)

- i. Supplies _____(08)
- ii. Communications (including telephone, postage) _____(09)
- iii. Equipment (*For faculty, staff, or classroom use only*)

(a) _____(10) Purchase

	(b) Rental	_____	(11)
	(c) Maintenance Contracts	_____	(12)
	Total Equipment [(10)+(11)+(12)]	_____	(13)
iv.	Travel		
	(a) Administration	_____	(14)
	(b) Faculty	_____	(15)
	(c) Other (Visitors, prospective faculty, field trips)	_____	(16)
	Total Travel [(14)+(15)+(16)]	_____	(17)
v.	Duplicating/printing costs	_____	(18)
vi.	Dues, subscriptions, memberships	_____	(19)
vii.	Insurance	_____	(20)
viii.	Advertising	_____	(21)
ix.	Other (specify type and amount):		
	_____	_____	(22)
	_____	_____	(23)
	_____	_____	(24)
	_____	_____	(25)
	Total Other Expenses [(22)+(23)+(24)+(25)]	_____	(26)
TOTAL TEACHING AND ADMINISTRATION EXPENSES			
	Sum of A.i.-ix		
	[(08)+(09)+(13)+(17)+(18)+(19)+(20)+(21)+(26)]	_____	(27)

(B) LIS School Library

i.	Collection	_____	(28)
ii.	Equipment		
	(a) Purchase	_____	(29)
	(b) Rental	_____	(30)
	(c) Maintenance Contracts	_____	(31)
	Total Equipment [(29)+(30)+(31)]	_____	(32)

iii. Other (Specify type/amount)		
(a) _____	_____	(33)
(b) _____	_____	(34)
Total other [(33)+(34)]	_____	(35)
TOTAL LIBRARY SCIENCE EXPENSES		
Sum of B.i.-iii. [(28)+(32)+(35)]	_____	(36)
(C) LIS Computer Lab(s)		
i. Manuals, Software	_____	(37)
ii. Equipment		
(a) Purchase	_____	(38)
(b) Rental	_____	(39)
(c) Maintenance Contracts	_____	(40)
Total Equipment [(38)+(39)+(40)]	_____	(41)
iii. Other (Specify type/amount)		
(a) _____	_____	(42)
(b) _____	_____	(43)
Total other [(42) +(43)]	_____	(44)
TOTAL COMPUTING LAB EXPENSES		
Sum of C.i.-iii. [(37)+(41)+(44)]	_____	(45)
(D) Funded Research Total	_____	(46)
(E) Student Aid (<i>excluding</i> teaching assistants and graduate assistants)		
i. Fellowships and Scholarships	_____	(47)
ii. Other (Specify type and amounts)		
(a) _____	_____	(48)
(b) _____	_____	(49)
Total Other [(48)+(49)]	_____	(50)
TOTAL STUDENT AID		
Sum of E.i.-ii. [(47)+(50)]	_____	(51)
(F) Continuing Education, Workshops, Institutes	_____	(52)

(G) Other Expenses (Specify type and amount):

(a) _____	_____ (53)
(b) _____	_____ (54)
(c) _____	_____ (55)
Total Other Expenses [(53)+(54)+(55)]	_____ (56)

3. **Summary of Expenditures**

(A) Salaries and Wages (Total from Column (01), page 1)
_____ (57)

(B) Operating Expenses
Sum of A-G Totals [(27)+(36)+(45)+(46)+(51)+(52)+(56)]
_____ (58)

8)

TOTAL EXPENDITURES [(57)+(58)]
_____ (59)

B. SOURCES OF FUNDS - INCOME

1. Parent Institution	_____	(60)
2. Federal Grants/Contracts	_____	(61)
3. CE Activities	_____	(62)
4. Endowment/Trust Funds	_____	(63)
5. State/Provincial Grants/Contracts	_____	(64)
6. Other (specify type and amount):		
a. _____	_____	(65)
b. _____	_____	(66)
c. _____	_____	(67)
Total Other [(65)+(66)+(67)]	_____	(68)
TOTAL SOURCES OF INCOME		
Sum of B.1-6 [(60)+(61)+(62)+(63)+(64)+(68)]	_____	(69)

Line (69) should be consistent with line (59). If totals differ widely, please explain below:

a. If expenditures are greater than income, how is overage covered?

b. If income is greater than expenditures, can funds be carried forward to next fiscal year?

_____ yes _____ no

Comment:

C. ITEMS NOT INCLUDED IN THE LIS SCHOOL BUDGET

If the parent institution (and/or its library or computer service organization) furnishes services and materials or provides benefits without budget charges, these items should be listed here. DO NOT list general institutional services such as heating, ventilation, or other maintenance costs unless they are specifically credited to the school's budget. Please specify item and amount:

_____	_____ (70)
_____	_____ (71)
_____	_____ (72)
_____	_____ (73)
_____	_____ (74)
_____	_____ (75)
_____	_____ (76)
_____	_____ (77)
_____	_____ (78)
TOTAL	_____ (79)

D. Funding from Parent Institution

1. Is the funding to the LIS school from the parent institution directly dependent upon:

FTE?	_____yes	_____no
Head count?	_____yes	_____no
# credit hours generated	_____yes	_____no
Other? (please indicate)	_____	

2. Did you receive an increase in funds from your parent institution in this reporting year?

_____yes _____no

3. If no, was your budget reduced or was it held at the same level as the previous year?

4. What is the budget outlook for your program for next year?

E. LIS Library

1. Is there an LIS library that is in a separate location from the main university library or that is a discrete unit within the main university library?

_____yes
 _____no

If the answer to No. 1 is yes, please answer the following:

2. Is the LIS library administratively a part of the main university library?

_____yes
 _____no

3. Does the LIS school provide all or most of the support for the LIS library?

_____yes
 _____no

4. Is the librarian of the LIS library funded by the LIS school?

_____yes
 _____no

F. LIS Computer Lab

1. Is there an LIS computer lab that is in a separate location from the main university computer support facility?

_____yes
 _____no

If the answer to No. 1 is yes, please answer the following:

2. Is the LIS computer lab administratively a part of the main computer support service?

_____yes
_____no

3. Does the LIS school provide all or most of the support for the LIS computer lab?

_____yes
_____no

4. Is the lab supervisor of the LIS computer lab funded by the LIS school?

_____yes
_____no

Appendix 5: ALISE Professional Continuing Education Questionnaire

ASSOCIATION FOR LIBRARY AND INFORMATION SCIENCE EDUCATION**STATISTICAL REPORT QUESTIONNAIRE 2002****PART V****CONTINUING PROFESSIONAL EDUCATION**

Please complete the following contact information identifying the person completing this part of the Statistical Report, and **append announcements of your continuing education activities**. This will help if questions arise in interpreting the data. Please be sure to return this cover sheet with the questionnaire.

Name: _____

Title: _____

Phone Number: _____

Fax Number: _____

Email Address: _____

University: _____

If questions arise in completing this part of the questionnaire, or if you have comments on its content, please contact the author of this section:

Jana Varlejs
School of Communication, Library and Information Studies
Rutgers University
4 Huntington Street
New Brunswick, NJ 08901-1071

Telephone: 732-932-1726
Fax: 732-932-2644
Email: varlejs@scils.rutgers.edu

PART V: CONTINUING PROFESSIONAL EDUCATION

This section should include information on continuing education activities which are offered specifically for practicing information professionals during the **2001-2002** academic year.

Do not include activities or courses intended primarily for library/information science degree program students. Report 6th year and other post-masters enrollments in regular masters and doctoral courses in Student Section.

Please refer to definitions pages at the end of this section and read all definitions before answering the questions below. **Note that categories and definitions have been revised!**

1.A Type, Number, Duration, Location, etc. of Non-Credit Activities.

Please provide all information for each type of activity reported.

A. Non-Credit Activity (Use definitions provided)	Col. 1 Total number held	Col. 2 Total no. of contact hours (for activities in Col. 1. Do NOT multiply by Col. 3)	Col. 3 Total attendanc e (Do NOT count degree students)	Col. 4 Number of programs that offered CEUs	Col. 5 Number of CE events held on campus	Col. 6 Number held off campus	Col. 7 Number delivered by alternativ e methods (specify ²)
Institute, Symposium, Conference, Forum							
Workshop							
Lecture-mode presentation							
Seminar							
Short course							
Individualized Learning							
Other, Please specify _____ _____							

²Please refer to definitions and indicate mode of alternative delivery using the codes below. For teleconferencing, specify type and indicate whether you produced or received (e.g., 3 [I-B]; 1 [V1-way, rcvd]).

I-A	Internet, mostly asynchronous	ST	Study tour
I-B	Internet, mostly synchronous	TV	Television broadcast
C	Correspondence	V1-way	Video one way only
E	ETN	V2-way	Audio/video both ways
	Other, specify		

<u>TOTA</u> <u>L</u>							
-------------------------	--	--	--	--	--	--	--

Local (within 25 miles) _____ %
 State/Province _____ %
 Regional (nearby states/provinces) _____ %
 National (beyond region) _____ %
 International (outside country) _____ %

3. Financial Support

From where did your continuing education support come: for salaries for the CE portion of administrators and support staff, for stipends or salaries of CE teaching staff, for travel and other expenses associated by CE speakers/faculty, facility rental and other CE program related costs. (Exclude overhead for own facility space use, both as office and as CE event site.)

Fees and tuition _____ %
 Institutional funds _____ %
 Government grants _____ %
 Other grants _____ %
 Contracts _____ %
 Other (specify)
 _____ %
Total 100%

Are you required to return a portion of your income to your university? ___ What %?

4. Compensation for continuing education program faculty

How was the fee or honorarium for presenters/instructors determined? Check all that are applicable.

	Non-credit Activities		Courses for Credit	
	School's Own Faculty	Outside Instructors	School's Own Faculty	Outside Instructors
Negotiated				
Flat Fee				
Formula (please explain) _____ _____ _____				

Part of teaching load (no extra compensation)				
---	--	--	--	--

5. Faculty/Staff

Indicate the extent to which you used your own faculty and other instructor/presenters.

	Not at all				to a great extent
LIS faculty in own institution	1	2	3	4	5
LIS faculty from other institution	1	2	3	4	5
Non LIS faculty in own institution	1	2	3	4	5
Non LIS faculty from another institution	1	2	3	4	5
Library/information science practitioners	1	2	3	4	5
Consultants	1	2	3	4	5
Vendors	1	2	3	4	5
Others (Specify)					
_____	1	2	3	4	5
_____	1	2	3	4	5

6. Administration and Coordination

Who administered (A) and/or coordinated (C) your continuing education program?

Indicate A and/or C for all that apply:

	Total Program	Individual Activities
a. Library School coordinator (other than d, e, or f)		
b. University Office of CE or Extension		
c. Faculty Committee		
d. One faculty member as permanent administrator		
e. Faculty rotate		
f. Dean or director		

DEFINITIONS OF CE FORMATS AND DELIVERY MODES

Asynchronous -- Used to describe a situation where learners and instructor are not in communication at the same time for the most part, e.g., as in **Internet-based** or video-taped courses.

Conference – A general type of meeting, usually of one or more days' duration, attended by a fairly large number of people. The emphasis is on prepared presentations by authoritative speakers, although division into smaller group sessions for discussion purposes is often a related activity.

Continuing Education Unit (CEU) – Ten contact hours of participation in an organized continuing education experience under responsible sponsorship, capable direction and qualified instruction.

Correspondence - Course content delivered by mail, whether presented in print, video or audio tape, CD-Rom, or some combination.

ETN -- Educational Telephone Network, a telephone networking system that allows small groups of learners at several remote sites to communicate with the instructor and each other orally; see also **teleconferencing**.

Individualized Learning – A method of learning which leads the learner to control his/her progress in learning and/or where the content may be tailored to the learner's needs. Examples of delivery methods are **correspondence** (mail), computer-based , programmed text or teaching machine, independent learning on campus.

Institute – Similar to a **conference** but more tightly structured. Emphasis on providing instruction in principles and techniques. Institutes may have a certain continuity, for example, meeting on a yearly basis.

Internet-based -- Instruction delivered via the Internet. It can be designed for a cohort of learners and be part **synchronous**/part **asynchronous**, with due dates for assignments and course completion. Or, it can be entirely asynchronous, with learners working independently at their own pace, without a structured time frame, and without built-in communication among learners and between learners and instructor.

Lecture-mode presentation (oral or textual) - Designed to impart information, in contrast to the **workshop**, which usually seeks to develop skills or attitudes. The audience is expected to listen or read, rather than to be actively involved as in a workshop or interactive Internet course. A Web tutorial that requires no interaction would fall into this format category, with “Internet, mostly asynchronous” specified as the delivery mode.

Seminar – A small group of people with the primary emphasis on discussion under a leader or resource person or persons. In continuing higher education, a seminar is more likely to be a one-time offering, although it may continue for several days.

Short course – A sequential offering, as a rule under a single instructor, meeting on a regular basis for a stipulated number of class sessions over a short period of time (one to three weeks, for example). A short course may be for academic, post-master’s credit or not for credit. The non-credit course may resemble the credit course in everything but the awarding of credit. It may also be more informal and more flexible in its approach in order to meet the needs of student.

Study tour -- Course that incorporates travel to libraries or other sites related to the content of instruction. For contact hours, count only those during which lectures or other modes of instruction occur.

Symposium/Forum – Similar to **conference** / **institute**, but audience participation is built in.

Synchronous -- In Internet-delivered instruction, both instructor and students are online simultaneously. “Real-time” teleconferencing may be said to be synchronous.

Teleconferencing -- Synchronous exchange of audio, video, or text (or a combination) between two or more remote sites using telecommunication technology such as telephone or cable lines, satellite transmission., etc. In reporting this kind of delivery mode, please specify two-way video/audio, or one-way video with two-way audio, or one-way video/audio in combination with whatever other communication mode was used from remote sites .

Television-delivered -- Course broadcast via TV stations.

Workshop – Usually meets for a continuous period of time over a period of one or more days. The distinguishing feature of the workshop is that it combines instruction with laboratory or experiential activity for the participant. The emphasis is more likely to be on skill training or attitudinal change than on general principles. See also **Lecture-mode presentation**.

Appendix 6: The Usability Consent Letter

Dear respondent:

I am conducting a usability test of the ALISE Statistical Report Online Questionnaire System. The objectives of this study are to identify potential problems with the system and to evaluate the overall design and usability of the system.

I have been working as Research Assistant with ALISE editors Dr. Evelyn Daniel and Dr. Jerry Saye on a newly designed web-based system: The ALISE Statistical Report Online Questionnaire system. The system will enable the ALA-accredited Information and Library Schools participating in the ALISE Statistical Report research project to submit their data regarding Students, Faculty, Curriculum, Income and Expenditure and Continuing Education activities directly from the Internet to the back-end database connected by the interfaces. It is intended to replace the paper format you are using now and automate the data submission process. Basically the online questionnaire system will contain the same questions available in the paper version. There are no substantial changes in terms of content.

Dr. Evelyn Daniel and Dr. Jerry Saye fully support the research efforts. They contacted Dean Marshall and she agreed that your institution would participate in this study. However, you remain free to make your own decision. Your Dean will not be notified of your decision.

When participating the study, you will be requested to enter the data you submitted in the paper questionnaire of year 2002 in the online system and write down any problems you come across. The estimated maximum time you will spend in completing each chapter is as follows:

Students Questionnaire:	30-40 min
Faculty Questionnaire:	20-30 min
Curriculum Questionnaire:	30-40 min
Income and Expenditure Questionnaire:	20-30 min
Professional Continuing Education Questionnaire:	20-30 min

After completing the data submission and feedback form, you will be requested to fill out a short survey with 5 questions asking about your overall impression of the system and your comments and suggestions. The overall time spent on one chapter of the questionnaire won't exceed one hour.

We would appreciate it if you respond within 5 workdays. You can conduct the task at any time that is convenient to you within the 5 days. Then you are requested to email us the feedback form and survey.

Efforts will be made to protect your privacy. Any information obtained in the usability test will be recorded using a participant number and not the participant's name. Data collected will be used to improve the system; neither school name nor individual name will be included in any publications.

This study has been approved by the Academic Affairs Institutional Review Board (AA-IRB). You may contact the of the AA-IRB of University of North Carolina at Chapel Hill at (919) 962-7762, or aa-irb@unc.edu, if you have any questions or concerns about your rights as a research participant.

The ALISE Statistical Report Online Questionnaire System is an attempt to automate the process of collecting and compiling the data for ALISE Statistical Report. Your time and effort will be highly appreciated. Your feedbacks will be of great value to help us improve the system. You will in turn have a more friendly and powerful system next year when the system is put in use.

If you decide to participate in the study, please send me a consent email at yanfang@email.unc.edu by Tuesday (Nov. 5th) noon. An information package with details of this study will then be emailed to you.

If you have any questions regarding the usability test or the system, please contact me at the above email or my advisor, Dr. Stephanie Haas, at stephani@ils.unc.edu.

Thanks again.

Sincerely,

Yanfang Jiang
Graduate Student, School of Information and Library Science
University of North Carolina at Chapel Hill
Email: yanfang@email.unc.edu
Phone: (919) 914-7781

Appendix 7: The Usability Cover Letter

Dear respondent:

Thank you for participating in the ALISE Statistical Report Online Questionnaire System Usability Study.

The attached information package includes the files you will need for the study as follows:

- *List of tasks*: This lists all the tasks you will need to do. Please follow the steps on “list of tasks” and complete all tasks listed.
- *Feedback form*: You will use this form to keep track of all the problems you encounter when filling out the questionnaire.
- *Survey*: You are requested to fill out the survey after you complete your data entry.

The following is the information you need to access the system:

Your username: XXXX (all in lowercase)

Your password: XXXX (all in lowercase)

URL of the prototype: http://owl.ils.unc.edu/projects/ALISE_DB/pages/login.asp

There are a few points to which you need to pay attention in your completion of the questionnaires:

1. The System doesn't provide a “save result” function; therefore, you can't do part of the data entry, leave and come back to complete the rest. You must finish the data entry tasks of the chapter you are responsible to complete **all at one time**.
2. There are no specific instructions for the system. Since the online system is structured to resemble the printed questionnaire that has regularly been used, the use of the online system should be self-evident.
3. When filling out the questionnaire, if you find that you have made mistakes in previous page(s), don't go back; please proceed. After you submit all the data, an update page will show up, where you can choose to make corrections on any page you want.
4. On each page, please click the submit button only once. It is highly desirable that you don't go back to pages you have submitted. You will be able to review all the data submitted in the update page, which automatically shows up when you finish the data submission.

We would really appreciate it, if you can respond by Nov. 19th. After you complete the task, please send back the feedback forms and survey by email:

Email address: yanfang@email.unc.edu

Your participation will be of great value to our study and will be highly appreciated. If you have any questions or concerns about completing the questionnaire or about being in this study, you may contact me at (919) 914-7781 or at the above email address. Thanks.

Sincerely,

Yanfang Jiang

Graduate Student, School of Information and Library Science

University of North Carolina at Chapel Hill

Email: yanfang@email.unc.edu

Phone: (919) 914-7781

Appendix 8: The Usability List of Tasks

This is a list of tasks you are requested to complete for each chapter of the ALISE Statistical Report Online Questionnaire System Usability Study. Please read it before you start, then follow the steps and check each step when you complete it. It will help you keep track of the process.

Before log into the system:

- Have the data that you submitted in paper questionnaire of year 2002 ready.
- Make a copy of the feedback form and have it ready.

Interact with the system:

- Log into the system with given username and password.
- Enter the data into the system and click on the submit button when you finish on each page.
- After you enter the data, the system will direct you to an update page, where you can update data as needed.
- While interacting with the system, write down any problems you come across.
- Log out of the system when you have completed the data submission.

After you log out of the system:

- Fill out the survey.
- Send back the feedback form and the survey by email or fax.

Contact Information:

Email: yanfang@email.unc.edu

Thank you for your time and participation!

Appendix 9: The Usability Feedback Form

3. Full and Part-time Enrollment by Gender:

Which item	Problem description

4. Enrollment by Gender and Ethnic Origin:

Which item	Problem description

5. International Students Enrolled by Country of Origin:

Which item	Problem description

12. Degrees and Certificates by Gender and Ethnic Origin:

Which item	Problem description

13. Comment Page:

Which item	Problem description

Appendix 10: The Usability Survey

Survey for ALISE Statistical Report Online Questionnaire System Usability Study:

1. Do you think the online questionnaire system covers every function required by the ALISE Statistical Report data collection? Do you have suggestions on additional functions that should be included?

1	2	3	4	5
---	---	---	---	---

2. Please give your overall impression of the system (1 for poor; 5 for very good):

1	2	3	4	5
---	---	---	---	---

3. Is the system easy to navigate?

1	2	3	4	5
---	---	---	---	---

4. Are the instructions clear?

1	2	3	4	5
---	---	---	---	---

5. Do you have any other suggestions on future implementations? (This is an open question, please feel free to answer as much as you can, your answer will be a great help for evaluation and redesigning the online questionnaire system)

Appendix 11: Selected Interface Screenshots

Login Page

The screenshot shows a Microsoft Internet Explorer browser window displaying the ALISE Statistical Report and Database login page. The browser's address bar shows the URL: http://kiwi.ils.unc.edu/projects/ALISE_DB/pages/login.asp. The page content includes the ALISE logo, a navigation menu with links for 'ALISE Statistical Report Online' and 'Contact', and a login form with fields for 'Username:' and 'Password:', and a 'Submit' button. The browser's status bar at the bottom indicates 'Done' and 'Internet'.

ALISE Statistical Report and Database

ALISE Statistical Report Online Questionnaire

Login Page

To access the online questionnaires to submit data for the 2003 ALISE report, please provide the username and password that was mailed to your dean or director.

[ALISE Statistical Report Online](#)

[Contact](#)

Username:

Password:

Done Internet

Start 1:25 PM

ALISE Questionnaire ... Document1 - Microsoft Word

Welcome Letter


Welcome letter - ALISE Questionnaire - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites Media History Mail Print Edit Discuss Dell Home NetAnts Real.com

Links AOL Anywhere AOL Corporate Site AOL Hometown AOL Instant Messenger AOL Search AOL Web Mail Find a Business Find a Person

Address http://kiwi.ils.unc.edu/projects/ALISE_DB/pages/welcome_letter.asp

 **ALISE Statistical Report and Database**

Dear Colleague:

Questionnaire:

- [Student](#)
- [Faculty](#)
- [Curriculum](#)
- [Income & Expenditure](#)
- [Continuing Education](#)

[Log out](#)

For a number of years, the Association for Library and Information Science Education (ALISE) and the Committee on Accreditation (COA) of the American Library Association have cooperated on statistical data collection from library and information studies programs. We again invite your continued participation in this year's effort.

Data collection forms for your statistical reporting are available now as rich text files for downloading at <http://ils.unc.edu/ALISE/>. Although you will be receiving the questionnaires electronically, the completed questionnaires must be submitted to the ALISE co-editors in hard copy. In the electronic format you will receive the following items: Faculty Part I, Faculty Part II (Confidential), Students, Curriculum, Income and Expenditure, and Continuing Education. Additionally, the letters of transmittal for both ALISE and COA and a submission checklist also are included at <http://ils.unc.edu/ALISE>.

Completed questionnaires are due October 15, 2002. A full set of completed questionnaires is to be printed and mailed to ALISE. In addition, certain sections of the questionnaires must be submitted directly for the ALA Committee on Accreditation to the Office for Accreditation (see attached Checklist). The Office for Accreditation will accept submissions electronically via e-mail attachments, but will still require one paper copy to be sent. If you chose NOT to submit COA-required information electronically, you will need to send the customary five (5) paper copies to the Office for Accreditation. You may submit either the entire questionnaire or just COA-required information to the Office for Accreditation.

Sincerely,

Evelyn H. Daniel and Jerry D. Saye Karen O'Brien
Co-editors Assistant Director
Library and Information Science Education Statistical Report ALA Office for Accreditation

Done Internet

Start 1:28 PM

Welcome letter - ALI... Document1 - Microsoft Word

Contact Information Page – Students Questionnaire

ALISE Statistical Report and Database

Student Questionnaire

South Carolina

Please complete the following contact information identifying the person completing this part of the Statistical Report. This will help if questions arise in interpreting the data.
(Fields with * are required field)

Questionnaire:

- [Student](#)
- [Faculty](#)
- [Curriculum](#)
- [Income & Expenditure](#)
- [Continuing Education](#)

[Log out](#)

*Name:

*Title:

*Phone Number:

Fax Number:

*Email Address:

Normal Submit Page - Students Questionnaire

Page 4, ALISE - Students Questionnaire - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites Media History Mail Print Edit Discuss Dell Home NetAnts Real.com

Links AOL Anywhere AOL Corporate Site AOL Hometown AOL Instant Messenger AOL Search AOL Web Mail Find a Business Find a Person

Address http://kiwi.ils.unc.edu/projects/ALISE_DB/pages/prog11_p3.asp

ALISE Statistical Report and Database

Students Questionnaire

ALA-Accredited Master's - Library Science
for **South Carolina**

Program Enrollment and Residency Status - Fall, 2002
The sum of 1. 2. 3. must equal the confirmed **total** students enrollment: **100**

- Progress Indication:**
4 / 10
- Previous Page:**
International Students
Enrolled by Country of
Origin
- Next Page:**
Enrollment by Gender and
Age
- [Confirmation table of total values](#)

1. In-state students:	<input type="text" value="0"/>
2. Out-of-state students:	<input type="text" value="0"/>
3. Residency status not available:	<input type="text" value="0"/>

If you want to comment on any information you have entered above, click

Done Internet

Start screenshot - Microsoft Word Page 4, ALISE - Stud... 1:56 PM

Definition Page – Students Questionnaire

Choose Program Page, ALISE - Students Questionnaire - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Fav

Links AOL Anywhere AOL Corporate Site AOL Hometown AOL

Address http://kiwi.ils.unc.edu/projects/ALISE_DB/pages/choose_prog.asp

ALISE Statistical Report

Please mark each program that has been collected in Fall, 2002

- Bachelor's
- ALA-Accredited Master's --
- Master's -- Information Sci
- Other Master's
- Post-Master's
- Doctoral
- Other Undergraduate
- Other Graduate

Continue

ALA-Accredited Master's -- Library Science:
Include here only those students working towards a separate master's degree in library science or a combined library and information science degree accredited by ALA, regardless of whether offered on or off campus. Do not include students taking courses as cognate or service courses. Report them as "Other Graduate."

American Indian or Alaskan Native
A person having origin in any of the original peoples of North America, and who maintains cultural identification through tribal affiliation or community recognition.

Asian or Pacific Islander
A person having origin in any of the original peoples of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands. This area includes, for example, China, Japan, Korea, the Philippine Islands, Samoa, and Taiwan. The Indian subcontinent includes the countries of India, Pakistan, Bangladesh, Sri Lanka, Nepal, Sikkim, and Bhutan.

Bachelor's:
Include here only those students who are working toward a bachelor's degree in library and information science, regardless of whether offered on or off campus. Do not include students taking courses as cognate or service courses. Report them as "Other Undergraduate."

Black, not of Hispanic Origin
A person having origin in any of the black racial groups of Africa.

Doctoral:
Include here only those students who are working toward a doctoral degree in library and information science, regardless of whether offered on or off campus. Do not include students taking courses as cognate or service courses. Report them as "Other Graduate."

Done Internet

Start

screenshot - Microsoft Word Choose Program Page, ALIS... Definition Page, ALIS...

2:01 PM

Comment Page – Students Questionnaire

Page 1, ALISE-Students Questionnaire - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop

Address http://kiwi.ils.unc.edu/projects/ALISE_DB/pages/comment.asp

Comment Page for Student Questionnaire - Fall, 2002

Table number: 1

Item number:

*Please enter the question number you want to comment on here.

Comment:

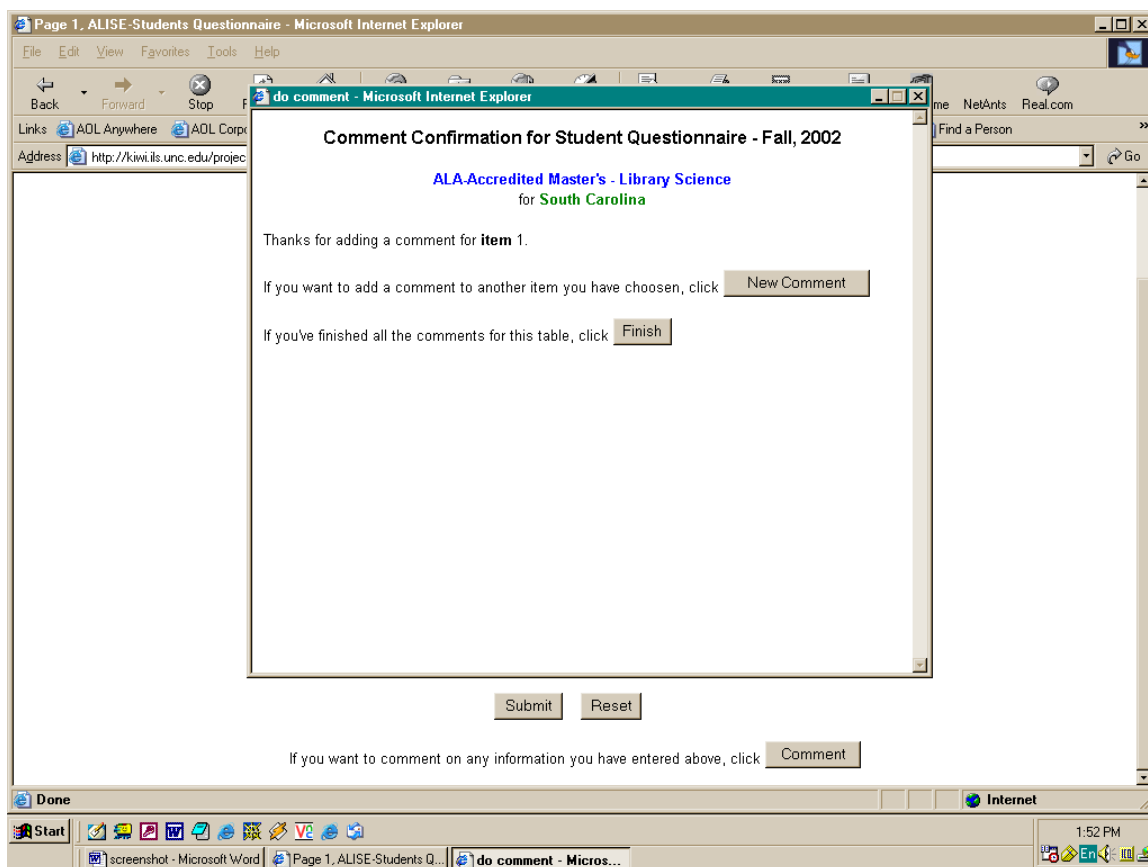
If you want to comment on any information you have entered above, click

Done Internet

Start 1:50 PM

screenshot - Microsoft Word Page 1, ALISE-Students Q... <http://kiwi.ils.unc.edu...>

Comment Follow-up Page – Students Questionnaire



Update Scenario Page – Students Questionnaire

Student Questionnaire Confirmation and Update Form

For **ALA-Accredited Master's - Library Science, South Carolina**, fall, 2002

1. [Enrollment by Gender and Ethnic Origin](#)
2. [International Students Enrolled by Country of Origin](#)
3. [Program Enrollment and Residency Status](#)
4. [Enrollment by Gender and Age](#)
5. [Tuition and Fees](#)
6. [Scholarship and Fellowship](#)
7. [Assistantship](#)
8. [Degrees and Certificates by Gender and Ethnic Origin](#)

ALISE Statistical Report and Database

Thanks! You have finished completing the questionnaires on Student Enrollment Data for Program **ALA-Accredited Master's - Library Science**

If you want to check or update the values that you have entered for this program, please choose the corresponding page from the index table on the left.

Otherwise, click the button below to continue.

Done Internet

Start screenshot - Microsoft Word Main Update Page, A... 1:57 PM

Normal Update Page – Students Questionnaire

Microsoft Internet Explorer window: Main Update Page, ALISE- Students Questionnaire

Address: http://kiwi.ils.unc.edu/projects/ALISE_DB/pages/summary.asp

Student Questionnaire Confirmation and Update Form

For **ALA-Accredited Master's - Library Science, South Carolina**, fall, 2002

- [Enrollment by Gender and Ethnic Origin](#)
- [International Students Enrolled by Country of Origin](#)
- [Program Enrollment and Residency Status](#)
- [Enrollment by Gender and Age](#)
- [Tuition and Fees](#)
- [Scholarship and Fellowship](#)
- [Assistantship](#)
- [Degrees and Certificates by Gender and Ethnic Origin](#)

ALISE Statistical Report and Database

Students Questionnaire

ALA-Accredited Master's - Library Science
for **South Carolina**

Program Enrollment and Residency Status - Fall, 2002

The sum of 1. 2. 3. must equal the confirmed **total students** enrollment: **100**

1. In-state students:	<input type="text" value="100"/>
2. Out-of-state students:	<input type="text" value="0"/>
3. Residency status not available:	<input type="text" value="0"/>

Taskbar: Start, screenshot - Microsoft Word, Main Update Page, A..., 1:58 PM

Update Confirmation Page – Students Questionnaire

Student Questionnaire Confirmation and Update Form

For **ALA-Accredited Master's - Library Science, South Carolina**, fall, 2002

- [1. Enrollment by Gender and Ethnic Origin](#)
- [2. International Students Enrolled by Country of Origin](#)
- [3. Program Enrollment and Residency Status](#)
- [4. Enrollment by Gender and Age](#)
- [5. Tuition and Fees](#)
- [6. Scholarship and Fellowship](#)
- [7. Assistantship](#)
- [8. Degrees and Certificates by Gender and Ethnic Origin](#)

ALISE Statistical Report and Database

Students Questionnaire

ALA-Accredited Master's - Library Science
for **South Carolina**

Update for Program Enrollment and Residency Status - Fall, 2002

Thank you for making changes in value(s) of page:
Program Enrollment and Residency Status
The data has been updated.

If you want to check and update values from the other pages, please choose the corresponding page from the index table on the left.

Otherwise, click the button below to confirm your completion.

Done Internet

Start screenshot - Microsoft Word Main Update Page, A... 1:59 PM

Completion Page – Students Questionnaire

The screenshot shows a Microsoft Internet Explorer browser window. The title bar reads "ALISE Questionnaire- Students Questionnaire Completion Confirmation Page - Microsoft Internet Explorer". The address bar shows the URL "http://kiwi.ils.unc.edu/projects/ALISE_DB/pages/stuComp.asp". The main content area features the ALISE logo on the left and a central message: "ALISE Students Questionnaire", "Congratulations! You have finished completing the questionnaires on Students Enrollment Data.", and "Please log out the system or close the browser." On the left side, there is a "Questionnaire:" section with a list of links: "Student", "Faculty", "Curriculum", "Income & Expenditure", and "Continuing Education", followed by a "Log out" link. The browser's taskbar at the bottom shows the Start button, several application icons, and the system tray with the time "1:35 PM".

ALISE Statistical Report and Database

ALISE Students Questionnaire

Congratulations!
You have finished completing the questionnaires on
Students Enrollment Data.

Please log out the system or close the browser.

Questionnaire:

- [Student](#)
- [Faculty](#)
- [Curriculum](#)
- [Income & Expenditure](#)
- [Continuing Education](#)

[Log out](#)

Logout Page

