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Developing a web-based assessment instrument

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Developing a web-based assessment instrument

Abstract

Public demand for affordable and quality higher education continues to pressure institutions to evaluate the effectiveness of the learning experiences. Traditional paper surveys have been utilized to gather data in the past. The World Wide Web can provide many of the same benefits in delivering a survey instrument while offering more convenience, lower costs, and a more flexible data set.

This report of the graduate project documents the process employed when developing a web-based assessment instrument. It outlines a method and procedure for connecting a web site with a FileMaker Pro database. In addition, it provides documentation for the implementation of the instrument, and it proposes recommendations for future versions based on this model.

DEVELOPING A WEB-BASED ASSESSMENT INSTRUMENT

A Graduate Project

Submitted to the

Division of Educational Technology

Department of Curriculum and Instruction

in Partial Fulfillment

of the Requirements for the Degree

Master of Arts

UNIVERSITY OF NORTHERN IOWA

by

Robin L. Galloway

May, 2000

This Project by: Robin L. Galloway

Titled: Developing a Web-Based Assessment Instrument

has been approved as meeting the research requirements for the
Degree of Master of Arts.

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Introduction

Public demand for affordable and quality higher education continues to pressure institutions to evaluate the effectiveness of the learning experiences that they offer students (Graham and Cockriel, 1997; House, 1999). Graham and Cockriel (1997) suggest that accountability will remain a critical issue for colleges and universities and that a focus on the outcomes of efforts to provide effective educational opportunities should address several factors related to a person's experience in college. Assessing the broad conceptual outcomes of the college experience and the factors that contribute to a person's success facilitates instructional program reviews and strategic planning efforts.

The Division of Educational Technology at the University of Northern Iowa needed an instrument that would facilitate an assessment of student outcomes of the division's graduate degree programs. Doing so required that (1) the scope of the assessment be defined, (2) an adequate assessment instrument be identified, and (3) the instrument and related procedures for deploying it be developed. The result of this process is a web-based survey to measure four factors pertaining to the ability of the graduate degree programs to prepare people for careers in the field of educational technology.

Traditional paper surveys have been utilized to gather data in the past. The World Wide Web can provide many of the same benefits in delivering a survey instrument while offering more convenience, lower costs, and a more flexible data set. A literature review is included to support this issue and to present a brief discussion of current research in the area of assessment and accountability in higher education.

This report of the graduate project documents the process employed when developing a web-based assessment instrument. It outlines a method and procedure for connecting a web site

with a FileMaker Pro database. In addition, it provides documentation for the implementation of the instrument, and it proposes recommendations for future versions based on this model.

Terms

1. Internet - A global network of networks connecting computers around the world via TCP/IP.
2. TCP/IP - The communication standard of the Internet, this protocol allows personal computers and other devices to interface with each other across local or wide area networks.
3. TCP/IP Network - Two or more computers communicating via the TCP/IP Internet protocol.
4. World Wide Web - The graphical form of the Internet that delivers multimedia content and is navigable via a graphical user interface, i.e., using a computer mouse.
5. Web Site - A collection of documents published on the World Wide Web and connected by hyperlinks.
6. HTML - Hypertext Markup Language, the formatting language of the World Wide Web.
7. Claris HomePage - An HTML editor software application that allows people to easily publish HTML documents on the World Wide Web.
8. FileMaker Pro - A database software application which includes the Web Companion plug-in that allows web sites to interact with databases.
9. HTML Form - An HTML document that accepts data and transfers such data to some other application, such as a FileMaker Pro database.
10. Plug-In - One component of a software application which provides additional functionality and can be enabled or disabled.
11. CDML - Claris Dynamic Markup Language, the programming language which allows HTML forms to interact and communicate with FileMaker Pro databases.
12. Web Server - A computer that is dedicated to delivering HTML content across the Internet 24 hours per day, 7 days per week.

Literature Review

This literature review addresses the issue of assessment and accountability in higher education. It also examines the potential benefit of utilizing the World Wide Web as a medium for the collection of data when performing an instructional outcomes assessment. Paper survey instruments have been used for this purpose in the past. Web-based surveys might provide many of the same benefits while offering more convenience, lower costs, and a more flexible data set.

Graham and Cockriel (1997) note that learning and personal development are the result of a set of conditions to promote learning both in and out of the classroom. Institutions are then charged with the duty of creating an environment which integrates learning as well as personal development. However, these broad conceptual outcomes are not the only focus of self-examination on the part of higher education. Institutions also seek data to evaluate the effectiveness of specific programs in preparing students for successful careers in related fields.

In many cases, data is collected for these assessments by means of traditional paper surveys or questionnaires (Cartwright et al, 1999; Graham and Cockriel, 1997; House, 1999). House (1999) employed such a survey to gather responses from over 500 students with five years of college experience. This outcomes assessment sought information about the effects of students' entering characteristics combined with experiences that were gained in college. The synthesis and analysis of this data identified causal relationships, such as the influence of a student's high school grade point average on their self-ratings of academic ability in college.

A similar factor analysis was performed on data gathered from the American College Testing (ACT) College Outcomes Survey (House, 1997). This study also sought to identify categories of outcomes that were impacted by personal and social growth which resulted from

experiences in college. The data from this paper-based survey was analyzed to identify those attributes that college students perceived to contribute to their broad conceptual development.

The popularity of the Internet and increasing access to this resource raises the question of whether this medium might also facilitate such research efforts. Indeed, colleges and universities are employing the World Wide Web to deliver courses at a distance and to accommodate under-served populations. It would appear to be also a good method of survey administration and data organization.

The Office of Planning and Institutional Research at East Carolina University deployed a web-based survey to measure the quality of their distance education courses (Cartwright et al, 1999). Their initial effort was met with disappointing response levels for reasons discussed below. But after refining their model, later attempts demonstrated some benefits of a web-based survey instrument.

The traditional method of course evaluation, i.e. administering printed surveys in the classroom, was deemed inappropriate for the evaluation of courses delivered at a distance where students were not necessarily meeting in the same time or place (Cartwright et al, 1999). Therefore, a web-based instrument was developed with some benefits and limitations in mind.

Advantages included:

- Materials would not need to be copied and delivered to students.
- Results would not need to be manually synthesized. Rather, data could be automatically calculated and stored in a database.
- Students would have the opportunity to submit extensive comments.

Disadvantages included:

- It would be difficult to maintain the anonymity of respondents.
- Varying levels of access to the web might create an unfair bias.
- The survey could not be administered at one time and place.

The instrument itself was useful in this example (Cartwright et al, 1999). Submitted responses were complete and students provided positive comments about the format of the data collection. But an initial response of just 20 percent was attributed to difficult login procedures to access the instrument and poor communication with faculty who were expected to direct students to the survey. Following improvements in the login procedures and communication with faculty, the response rate more than doubled.

The attempt to maintain the anonymity of respondents in this study inadvertently created a difficult procedure for accessing the survey (Cartwright et al, 1999). The authors report that they used a combination of student identification numbers and confidential personal identification numbers to create login privileges. But this made it more difficult and time-consuming for students at a distance to complete the survey, and consequently the response was inadequate. Additionally, the authors note important characteristics of distance learners. They are typically busy people with careers outside of school. For this reason, they suggest that any web-based survey must be easily accessible and concise so as to take a minimal amount of time to complete.

Finally, Cartwright et al (1999) discuss the importance of user interface design. Their online survey was an attempt to resemble a paper survey in as much as the content was limited to one page on the Internet and radio buttons were used to represent bubble responses. However, because the survey was online it was important to provide links to relevant help systems and

persons to contact in case of difficulties or problems. The ability to incorporate text fields in a web-based survey also made it possible for respondents to provide extensive written comments. However, one of the most important characteristics of a web-based survey is its digital nature. Data acquired through such a medium can be instantly calculated and stored in a database or transferred and manipulated in a variety of ways.

The potential benefits of a web-based survey seem to outweigh its disadvantages. Therefore, it is not surprising that institutions are increasingly utilizing World Wide Web forms to gather data from students (Cartwright et al, 1999). Surveys, registration procedures, and help request forms are just a few examples of how institutions of higher education are utilizing online forms. This medium may not totally replace paper survey instruments, but their use will certainly continue to serve as an efficient and convenient method of gathering data.

Methodology

The process of developing this research project required that (1) the scope of the assessment be defined, (2) an adequate assessment instrument be identified, and (3) the instrument and related procedures for deploying it be developed. This section provides a general description of the decision-making process and the methods used to accomplish these tasks. The following section then outlines the steps taken in the process.

Scope of the Assessment

The goal of this outcomes assessment is to address the question, "Do the Division's graduate programs prepare students for professional careers in the field of educational technology?" Faculty in the Department of Curriculum and Instruction identified four desired outcomes of the instructional programs: leadership, scholarship, understanding of theory and research, and application of theory and research. Data was needed to demonstrate how these outcomes were realized by graduates of the Division of Educational Technology. A set of performance standards was identified to reflect the four departmental outcomes, and questions were developed that related to each of these standards (see Appendix A).

Information would be sought from alumni to determine how effectively their graduate degree programs prepared them to apply these attributes in their current career. A random sample of alumni from the past ten years would be contacted and asked to respond to a series of statements and questions in order to gather such data. The format of the survey and the questions to be included remained to be identified.

Identification of an Appropriate Instrument

Several technologies were considered for the distribution of the assessment survey. A desire to gather data quickly and efficiently was paramount in deciding to utilize a digital format.

WebCT, software adopted and supported by the University of Northern Iowa, facilitates distance education courses and was considered a viable solution due to its ability to deliver surveys via the Internet. However, noting the difficulties experienced by Cartwright et al (1999), the decision was made to avoid requiring login privileges, as is inherent to WebCT, in order to access the survey. Rather, an alternative method for identifying duplicate responses while maintaining anonymity was sought.

The ability to record responses in a database and automatically calculate data in a way that would identify trends and relationships was appealing to this researcher as well as the faculty. A solution was sought that would maintain a flexible data set that could be easily shared between software applications. An investigation into the process of connecting an HTML form to a database ensued.

Claris HomePage software was identified as a mechanism to develop a web-based survey as it was possible to interface with a FileMaker Pro database. In fact, the FileMaker Connection Assistant built into Claris HomePage software easily facilitates this process. A web-based survey, created with Claris HomePage and powered by FileMaker Pro, was subsequently identified as the medium for this project.

Development of the Instrument

The process of developing the instrument began with a need to clarify the content of the survey. Based on models employed by other divisions of the Department of Curriculum and Instruction, a series of statements was developed that reflected the performance standards developed by faculty of the Division of Educational Technology. Respondents of the survey would be asked to select from a range of responses to indicate their perception of how well their

graduate degree program prepared them to demonstrate these performance standards in their current position (see Appendix A).

Next, procedures were defined for the storage and delivery of necessary computer files. The Division of Educational Technology maintains its own web server. Therefore, to facilitate easy access to the data and to provide this researcher with further experience, it was decided that the database and web site would be hosted on this local web server.

Finally, the database itself was configured and the web site was created. A FileMaker Pro database was constructed to serve as both a container for data as well as a tool for calculating the acquired data. The web site was created with Claris HomePage and the FileMaker Connection Assistant (see Appendix B).

Evaluation

In order to determine the effectiveness of the instrument in achieving the goal of the assessment, a small sample of recent graduates was recruited to field test the project. They completed the outcomes assessment survey and then were transported to a separate survey where they reflected on the experience of completing the program evaluation survey (see Appendix C).

This evaluation survey was based on the same technologies, but it employed a more diverse collection of formats for response, including text fields for short answer responses and text areas to acquire more extensive written comments from respondents. The goal of this evaluation survey was to gather participants' perceptions of the validity of the instrument, the clarity of the instrument's purpose, and the usability of the user interface. The responses from participants served as a basis for revising and refining the survey instrument.

The Project

A systematic process led to the development of the web-based assessment instrument. The previous section discussed the methodology employed in the process, and the following outlines the steps taken in the developmental phase of the project. The initial discussion is about the preliminary configuration of both a database and a web site. This is followed by a discussion of the steps taken to customize the documents and deliver them to participating beta testers.

Setting Up the Database File

The first step taken in the production of the survey was to configure a database file. A new document was created in FileMaker Pro and the database fields were defined (see Figure 1). In most cases, the fields were formatted as text items and the names represented each of the Division's performance standards. Each field in the database, then, corresponds to a statement or question included in the survey. However, additional fields were created and configured as calculated fields. These fields would eventually calculate the sum of responses based on a range of available responses (see Appendix A).

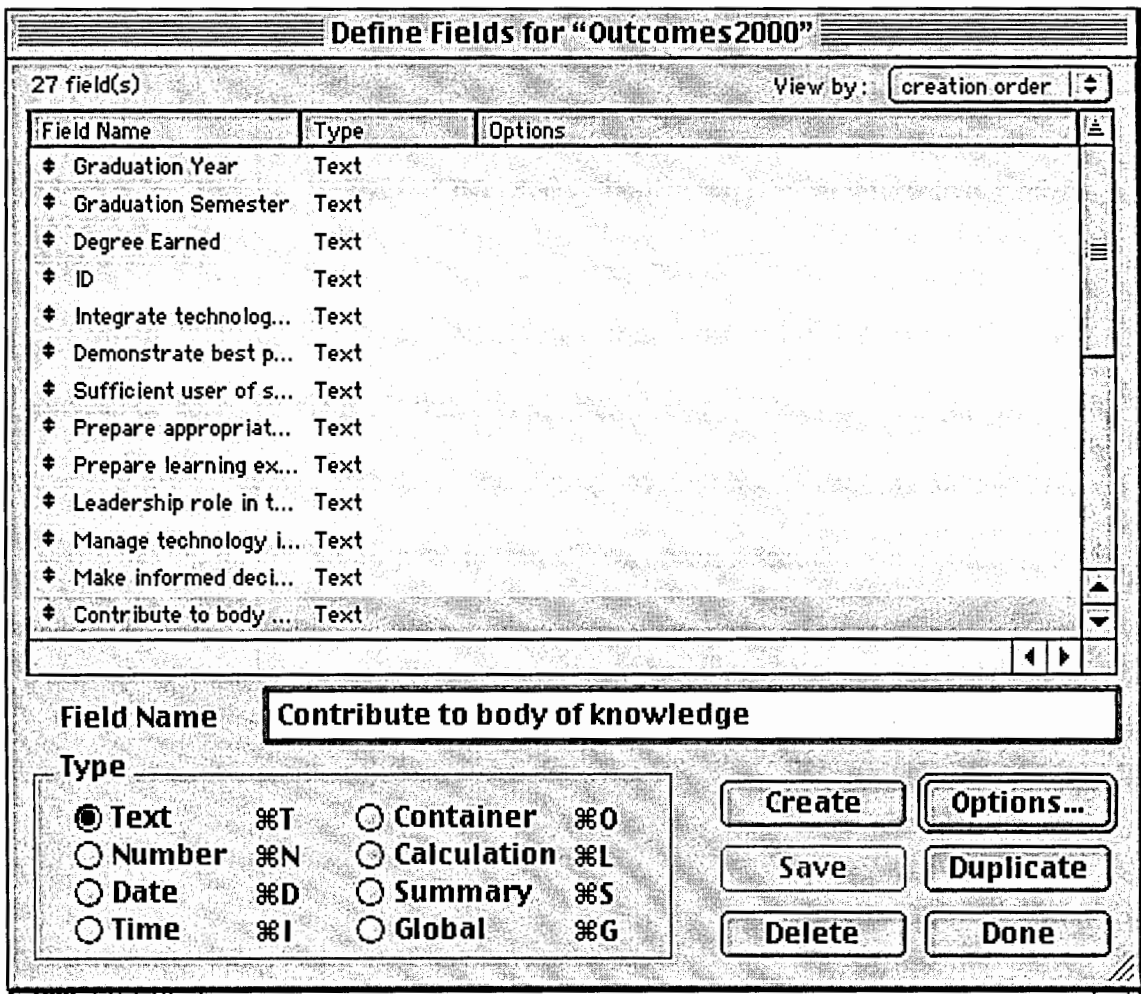


Figure 1

Once the fields were defined, a graphical layout was created to facilitate easy browsing of records in the database. The goal was to display all of the data to be acquired in a logical and intuitive way. Proximity of related information was the leading factor in creating this layout, although the end result was influenced by additional design principles, including the alignment and contrast of objects and text (see Appendix B).

Configuring the Web Companion Plug-In

The printed documentation that accompanies FileMaker Pro software is an excellent guide to the steps necessary for configuring a database to be shared across a network or via the

World Wide Web (FileMaker, 1999). The process involves both enabling and configuring the plug-in to communicate with HTML forms via the Internet. The Web Companion Plug-In servers as a built-in web server so that any personal computer can host an interactive database via the World Wide Web.

Enabling the Web Companion Plug-In requires adjusting the application's preferences. These can be accessed via the Edit menu in FileMaker Pro. To enable the plug-in, one must click on the "Plug-Ins" tab and then check the appropriate box in the resulting dialogue (see Figure 2). Finally, clicking on the "Configure" button allows one to select the name and location of the default HTML file, enable remote administration if desired, and select from logging options for this plug-in.

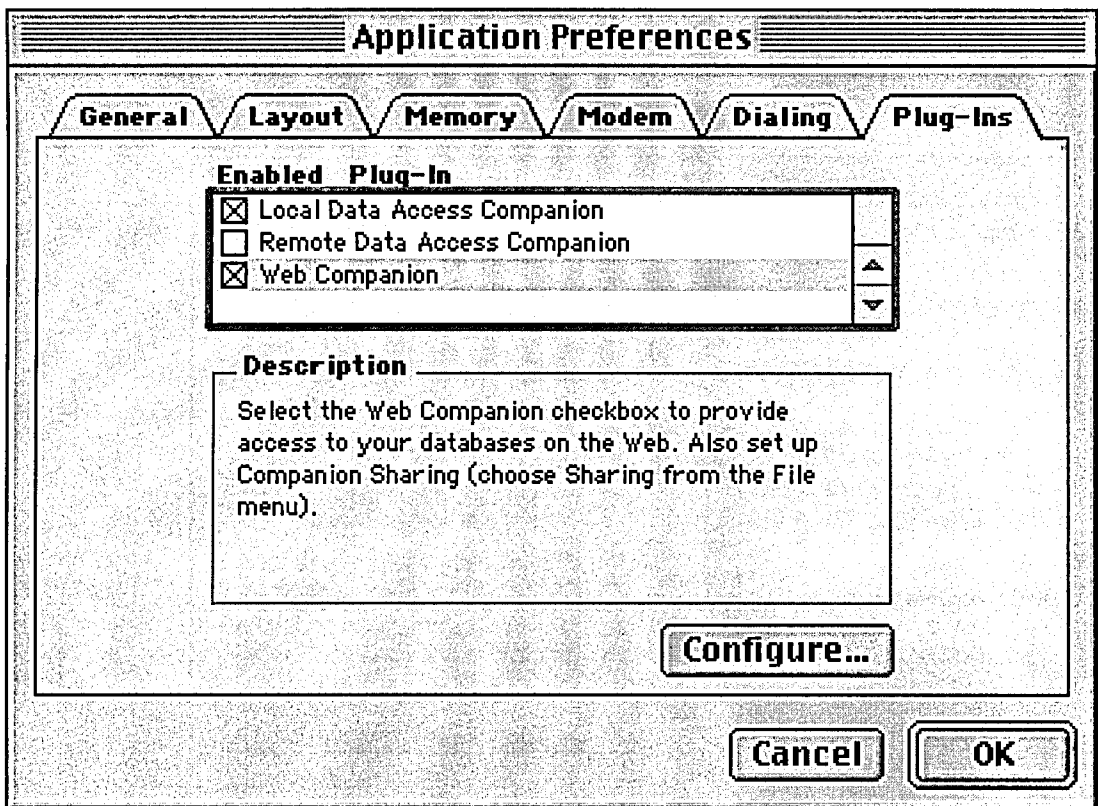


Figure 2

Using the FileMaker Connection Assistant

Claris HomePage software includes the FileMaker Connection Assistant that will automate the procedure for creating a web site that communicates and shares data with a FileMaker Pro database. To function, the database must be configured with the Web Companion Plug-In enabled, and this database must be accessible on a TCP/IP network. An easy to follow guide can be found in the Visual Quickstart Guide to Claris HomePage (Fenno, 1998).

To use the FileMaker Connection Assistant, one selects "New" from the File menu in Claris HomePage, then activates the radio button to use that assistant. Clicking the "OK" button will launch the assistant. Users then follow step-by-step instructions on several screens (see Figure 3). When the assistant has established communication with a FileMaker Pro database on the same network, then it proceeds to ask questions about the desired layout and functionality of the web site, and it creates the necessary HTML and CDML documents.



Figure 3

Customizing the Web Site

In fact, the FileMaker Connection Assistant is so easy to use that customizing the resulting web site is not necessary. However, this researcher wanted to incorporate custom graphics and create his own design and navigation system (see Appendix B). When the Connection Assistant is finished, the site is accessible via the site manager of HomePage (see Figure 4). Each page can then be modified, and additional graphics and pages can be added to the site.

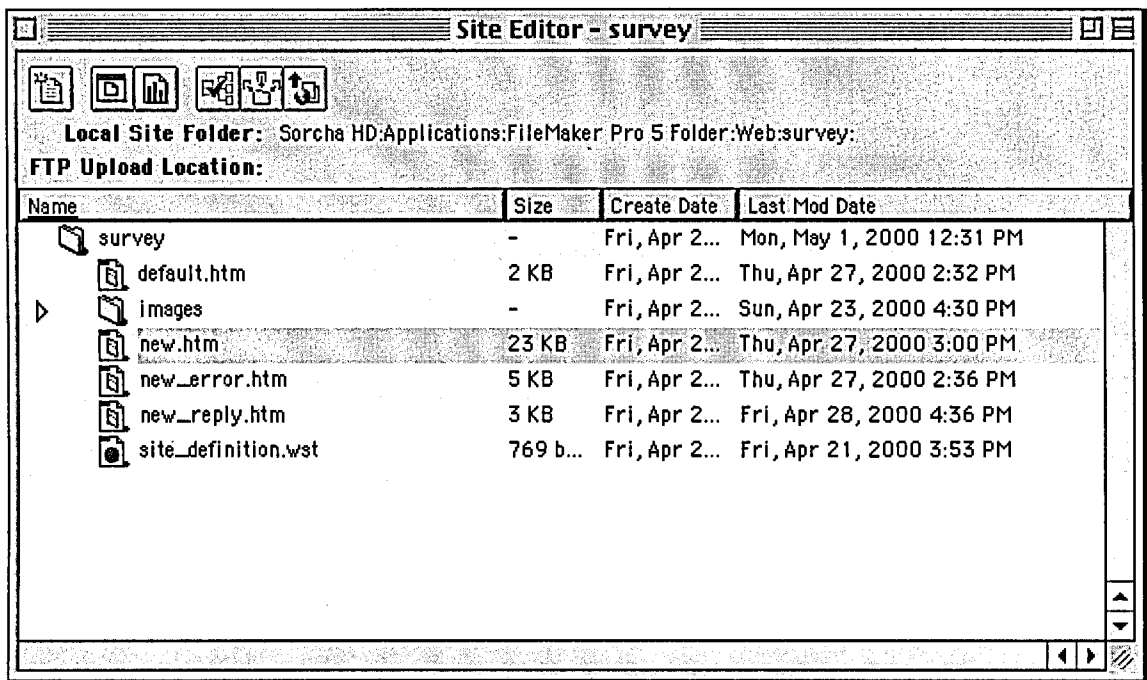


Figure 4

Changes did need to be made to the HTML form page. Because the FileMaker Connection Assistant was utilized, the survey items were initially worded exactly as their corresponding database field names. It was necessary to modify the wording of the survey items so that they were presented as clear statements or questions pertaining to the Division's performance standards (see Appendix B). The object editor also made it possible to alter the type

of form elements that were included in the survey, i.e. text fields and pop-up menus. Graphics, navigational links, and email links were added to provide an intuitive user interface as well as adequate support for anyone who might experience difficulties in completing the survey.

Uploading Documents to the Servers

In order to function, the FileMaker Pro database must be open on a computer with an active TCP/IP connection. Additionally, the web site must be uploaded to a web server so that it is accessible to survey participants. This can be accomplished using the File Transfer Protocol and compatible software.

During the initial testing of the project, it was discovered that the database and the web site cannot be hosted by the same computer. Because the web companion plug-in of FileMaker Pro functions as a virtual web server, it conflicts with other web server software, such as AppleShareIP which was running on the Division's web server. Therefore, a separate computer was configured with FileMaker Pro software, and this machine was dedicated to serving the FileMaker Pro databases which powered both the outcomes assessment survey and the evaluation survey used to field test this project.

Evaluation

Responses from those who helped beta test the outcomes assessment instrument were generally positive. They confirmed that the user interface was easy and accommodating. They also reported no significant problems in either accessing or submitting the electronic survey.

The majority of items included in the survey are multiple choice. At least one respondent commented that he would have preferred short answer responses to the range of responses available (see Appendix B). But the general consensus of respondents was that the available responses were adequate to convey their opinions. The capability of the database to

automatically calculate responses based on a numbering system would also be compromised in the event that responses were primarily short answers. Two areas of the survey do invite participants to submit extensive comments, and these should provide adequate opportunities for people to share any additional comments that they wish to submit.

Conclusion and Recommendations

The process of developing this web-based assessment instrument was both challenging and rewarding. Learning how to connect a web site with a relational database application was a valuable experience. The implications of this type of connectivity can be envisioned in a number of practical situations.

The validity of a web-based survey to facilitate the Division's outcomes assessment will likely be realized. The response from those who have helped evaluate the instrument has been positive. In addition, there have been no problems associated with connecting to or submitting the survey.

In order to maintain the relative anonymity of respondents, and to avoid the possibility of flawed data caused by duplicate records in the database, it is recommended that the last four digits of each respondent's social security number be requested at the time of completing the survey. This would minimize the possibility of flawed data while not impeding the process of accessing or submitting the survey.

What remains, then, is for the division to both approve and implement this instrument in its assessment process. Alumni will need to be contacted and directed to the web site where they will access the survey and submit their responses. The data gathered from these respondents will be recorded in the FileMaker Pro database, and it will be automatically calculated to show percentage scores for each of the four factors that were assessed. Finally, this data can be exported to a variety of applications, including spreadsheets, for further analysis by faculty and administrators.

References

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Appendix A

Content of the Outcomes Assessment Survey

General information to be requested

- Degree Earned: (Educational Technology or CT&T)
- Graduation Year: (1990-2000)
- Graduation Semester: (Spring, Summer, or Fall)
- Last 4 Digits of your Social Security Number: (Short answer)
- Your current position: (Short answer)

Response scale to be employed

People will respond to the statements below to indicate their perception of the effectiveness of their graduate degree program based on the following scale:

- Excellent
- Good
- Adequate
- Somewhat
- Not at all
- Not applicable

Responses will be converted to points according to the following scale:

- 5 = Excellent
- 4 = Good
- 3 = Adequate
- 2 = Somewhat
- 1 = Not at all
- 0 = Not applicable

Performance standards and statements to reflect each standard

Performance standards are listed below followed by their associated instructional outcome (all caps) and the statement used in the survey to reflect the standard.

Integrate technology into teaching - APPLICATION

- I make effective use of audiovisual materials and other technologies in my delivery of instruction.

Demonstrate best practices with appropriate technology - UNDERSTAND THEORY AND RESEARCH

- I make informed decisions about the selection of media based on my knowledge of learning theory and instructional design.

Sufficient user of software hardware for learners - SCHOLARSHIP

- I am comfortable with my ability to use current technologies in an educational environment as well as my ability to learn to use new technologies and software applications.

Prepare appropriate instruction - UNDERSTAND THEORY AND RESEARCH

- I follow a systematic development process when designing instruction, and I reflect upon theory and research when doing so.

Prepare learning experiences about technology - APPLICATION

- I can develop practical and innovative workshops that facilitate learning about technology.

Leadership role in technology integration - LEADERSHIP

- I am an effective coordinator of technology integration, or I am an active member of a technology committee that serves as such.

Manage technology in learning - APPLICATION

- I employ effective educational management skills to provide for a productive learning environment.

Make informed decisions on learning technology - UNDERSTAND THEORY AND RESEARCH

- I make informed decisions about instructional strategies based on learning theory and research.

Contribute to the body of knowledge - SCHOLARSHIP

- I employ my understanding of subject matter in the production of knowledge for other professionals through publication, presentations, or more informal sharing.

Engage in professional activities - LEADERSHIP

- I am a member of professional communities, either formal or informal, and seek to nurture my own professional growth, as well as the well-being of the profession, through active involvement in these groups.

Prepare professionals to integrate technology in learning - APPLICATION

- I model effective technology integration strategies in my own delivery of instruction.

Aware of specifics related to teaching adults - UNDERSTAND THEORY AND RESEARCH

- I apply my knowledge of age-appropriate teaching strategies, and I approach different age levels with an understanding of the characteristics of my learners.

Manage technology in performance technology training - APPLICATION

- I effectively direct the work of others in the area of technology instruction.

Create appropriate media with technology - APPLICATION

- I am comfortable using hardware and software to create media appropriate for my audience.

Opportunities for additional comments from respondents

The following items will be included to request additional comments from each participant. Text areas, as opposed to text fields or pop-up menus, will be included in the HTML form to facilitate responses to these items.

1. Are there elements of your job that you wish you had been better prepared to do?
Please describe how your program of study could have helped.
2. Please provide us with any additional comments you would like to share.

Appendix B



UNI Division of Educational Technology

Outcomes Assessment Survey



Introduction

As a graduate of one of UNI's Department of Curriculum and Instruction graduate programs, you are in a position to help us improve what we do.

We ask that you please complete a web-based survey regarding the quality of your program of study at UNI. Your responses will remain confidential, but the collective responses of those participating in this survey will provide us with valuable information as we continue to assess and enhance our programs of study.

Continue

Send questions or concerns to rabus@mac.com
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Updated: 04/27/2000



Directions

The following is a list of outcomes we hope our graduate students attain as a result of their participation in our programs.

- Leadership
- Scholarship
- Understanding of theory and research
- Application of knowledge

On the next page, you will be asked to respond to a series of statements. Each response should indicate how well your graduate experience at UNI prepared you for your current position or satisfied your learning goals and needs. This survey should take approximately 15 minutes to complete.

Back

Continue

Send questions or concerns to rabus@mac.com
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Outcomes Assessment Survey



Home

Back



Directions

Please provide us with some basic information about your degree and when you graduated, then rank each of the statements which follow to indicate how well your graduate experience at UNI prepared you for your current position or satisfied your learning goals and needs.

Please read each statement carefully and respond to each item before clicking on the submit button at the bottom of this page.

Degree Earned:

Graduation Year:

Graduation Semester:

Last 4 Digits of your Social Security Number:
(This helps us avoid having duplicate responses to our survey.)

Your current position

1. I make effective use of audiovisual materials and other technologies in my delivery of instruction.

2. I make informed decisions about the selection of media based on my knowledge of learning theory and instructional design.

3. I am comfortable with my ability to use current technologies in an educational environment as well as my ability to learn to use new technologies and software applications.


4. I follow a systematic development process when designing instruction, and I reflect upon theory and research when doing so.

5. I can develop practical and innovative workshops that facilitate learning about technology.


6. I am an effective coordinator of technology integration, or I am an active member of a technology

committee that serves as such.


7. I employ effective educational management skills to provide for a productive learning environment.


8. I make informed decisions about instructional strategies based on learning theory and research.


9. I employ my understanding of subject matter in the production of knowledge for other professionals through publication, presentations, or more informal sharing.


10. I am a member of professional communities, either formal or informal, and seek to nurture my own professional growth, as well as the well-being of the profession, through active involvement in these groups.


11. I model effective technology integration strategies in my own delivery of instruction.


12. I apply my knowledge of age-appropriate teaching strategies, and I approach different age levels with an understanding of the characteristics of my learners.

13. I effectively direct the work of others in the area of technology instruction.

14. I am comfortable using hardware and software to create media appropriate for my audience.

Are there elements of your job that you wish you had been better prepared to do? Please describe how your program of study could have helped.

Please provide us with any additional comments you would like to share.

Thank you for your participation! Please be sure that you have responded to each item, then click on the submit button.

Send questions or concerns to rabus@mac.com
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UNI Division of Educational Technology

Outcomes Assessment Survey



✓ Survey Submitted!

Your responses have been added to the outcomes2000 database.

Thank you!

As beta testers of this assessment instrument please continue to the next page to provide the creator with valuable information about the instrument used in this survey.

Continue



Send questions or concerns to rabus@mac.com
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Appendix C

Usability Testing Survey

UNI EdTech Outcomes Assessment

Thank you for your assistance with this project. Your feedback on the following page will be extremely helpful as revisions are made to this assessment instrument.

Continue

Graduate Research Project
Robin Galloway
UNI Division of Educational Technology
rabus@mac.com

Usability Testing Survey

UNI EdTech Outcomes Assessment

Please complete the following information to provide important feedback about the Student Outcomes Assessment Survey that you have just completed.

After responding to each question, then click on the submit button at the bottom of this page.

Year Degree Earned:

Degree Earned:

What is your current position?

First Name:

Last Name:

Email Address:

Your computer experience?

Your Internet experience?

Had you ever completed an online form prior to this survey?

Was it clear to you that the survey was trying to evaluate the effectiveness of your graduate program and not necessarily your current skills?

Were the questions stated clearly?

Were the available responses adequate to express your opinions?

If not, which format

of response would you
have preferred?

Would you have
preferred that a paper
copy of the survey had
been mailed to you
rather than completing
it online?

No

Comments regarding
the instrument used
for this assessment.

Your experience with
the user interface:

Easy, No Difficulties

Comments regarding
the user interface:

Did you have any
difficulties accessing
or submitting the
survey?

Thank you again for your participation in this usability test. Please click on the submit button to record your responses.

Submit

Reset this form

Usability Testing Survey

UNI EdTech Outcomes Assessment

✓ **Survey Submitted!**

Thank you!

A record has been added successfully to the feedback database.

Links from here:

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