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SURVEY RESEARCH ON LITTLE OR NO BUDGET:
PRACTICAL TIPS AND ADVICE FOR USING THE INTERNET TO CONDUCT SURVEYS

By Colleen Boff and Kristin Johnson

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INTRODUCTION:

Librarians commonly engage in survey research, both within the library for practical, day-to-day problem solving and data collection, and/or professionally for theoretical research used for tenure and promotion purposes. Although there are myriad methodologies from which to choose, survey research tends to be a popular choice of academic librarians. This type of research has historically been time consuming and cumbersome—lots of paper and envelopes…lots of stamp licking. Mind-numbing, wrist-wrenching data entry. Then comes the data analysis!

The Internet is a medium that can be used to streamline the process of conducting survey research and offers advantages over traditional survey mediums like the face-to-face interview, telephone interview, and paper-based survey. Among the advantages are the potential for quick response rates via Web forms or e-mail, as well as monetary savings related to postage, stationary, or long-distance charges. In this article, we will provide practical tips for using the Internet for survey research as well as advice and lessons learned from our experience using the Internet to conduct a large survey project on little or no budget.

BACKGROUND:

For many of us in academic libraries, conducting research is just one of many duties in which we are expected to engage. We often do not have the luxury of time to write and apply for research grants, or we simply choose not to in order to devote our limited time to other projects. With restrictive budgets and time constraints, many librarians need a cost effective and manageable way to conduct survey research without compromising the integrity of their study. Such was our situation. After numerous conversations about what we wanted to accomplish, as well as research into the resources offered at our respective campuses, we determined that we could conduct a major survey research project with no extra funding, using only the ordinary resources provided to us on our respective campuses.

OUR PROJECT:

Our survey population totaled 721 institutions, therefore the paperless medium of the Internet would be less expensive and more environmentally sound than using a paper mailing. It was also more efficient time-wise. And as previously mentioned, neither of us had any money to spend on the project!

Our study involved determining the extent to which information literacy was integrated into the curriculum of First Year Experience (FYE) courses on college campuses nationwide. (Boff 2002) Working with a mailing list compiled by The National Resource Center for the First Year Experience and Students in Transition (NRC), we were able to e-mail information about our web-based survey to 721 institutions. These institutions had previously responded to a survey conducted by the NRC to identify institutions that offered this type of course. (National Resource Center 2000)

The data we wanted to collect was not sensitive, or private (we could have gone to each of the schools and looked up the data ourselves.) Because anonymity was not a factor, we included three required fields in the survey: Institution Name, Respondent Name, and Respondent E-mail address. This helped us to generate a larger response rate because we were able to contact non-responding institutions via a second e-mail request.

Internet surveys can be conducted by e-mail, WWW, or a combination of both. Our survey was mounted on a web page (Boff n.d.) and our cover letter soliciting responses was sent by e-mail. You might think "How time consuming!" That was one of our biggest concerns, until a "techie" friend of ours (let's be honest…Kris' husband) told us about "mail-merge," a method of merging a Microsoft Word Document (our cover letter), a Microsoft Excel spreadsheet (our list of potential survey respondents), and the Outlook e-mail used at Kris' institution. (Kris phoned the User Services Department on her campus prior to attempting this to determine whether this would cause any load problems for the local e-mail server. It didn't.) Setting up and testing the mail-merge took about two hours. The mail-merged survey was started on a Tuesday evening at about 7:00 pm and took approximately 18 minutes to send more than 700 e-mails. As we expected, notices of 113 undeliverable e-mails were received due to expired e-mail accounts or addresses that were entered incorrectly into the Excel spreadsheet at the NRC. Needless to say, the most time consuming portion of this survey was not sending the e-mail cover letter, but tracking down e-mail address for the 113 undeliverable accounts. Overall, however, we were very pleased with the mail merge and satisfied when we received a return rate of more than 50%.

OUR ADVICE:

The Internet is a Valid Survey Medium

Based on our literature review, conversations with statistical experts, and our own experience conducting a large survey, we have learned that when done properly, the Internet can be a valid, reliable, and efficient tool that librarians should take advantage of to conduct their survey research.

Prior to embarking on our project, we consulted with statistical experts on our respective campuses to determine if our particular survey would work as a web-based survey. We also did our homework, in the form of a literature review to find out what other researchers were learning about this type of survey research. A July 2001 C&RL article (Perkins 2001) shed some light on the subject, as did articles from other disciplines, mainly Psychology and Education. We were particularly interested in articles comparing the reliability of paper-based surveys to online surveys. (Hancock 2000; Mertler 2002; Schonlau 2002; Stanton 1998) This research confirmed our hunch that the web would be a good medium for our survey and gave us the confidence to proceed with our project.

Your first concern, however, should not be the *medium*, but the soundness of your *methodology*.

Know Your Stuff

Concerns regarding the validity of your survey are justified, just as they should be for any survey, regardless of format. The quality of research in librarianship has been criticized. (McClure 1991) While the purpose of this article is not to rehash how to design a proper survey or how to find a statistically significant survey population, the best advice we can give you is to "know your stuff," which in this case is your research methodology. Survey research conducted by librarians, especially research that you hope to get published in a scholarly publication, should conform to proper survey methodologies as outlined in standard librarianship texts. (Busha 1980; McClure 1991; Powell 1997) Journal editors are looking for more quantitative and qualitative research from librarians as Hernon and Schwartz explain, "Understanding what research is and valuing its contribution to the theory and practice of LIS should not be the exception but, rather, the expectation of all of us in this profession." (2002): 207-8)

Talk to People

Before you begin, talk to anyone conducting survey research on your campus. Send an announcement via your faculty campus e-mail system to solicit support from other researchers who may have worked out some of the technical aspects of online survey research. Another likely group to solicit advice and help from are the people in the information technology division on your campus. They will know if your campus has the correct type of software and servers to, for example, handle the transfer of data from the submittable web form to some sort of spreadsheet software such as Access or Excel. In our situation, we did not have the proper software such as Coldfusion or VBScript that enabled the data from the web form to be directly dumped into a spreadsheet. Colleen's campus did, however have an office that employed a human (of all things!) to enter the data for us (at no charge!) Again, we would not have known about this resource had we not hit the pavement and started talking with other researchers. Finally, consult with your campus' office of institutional research for ideas. Their job is to keep current regarding research trends and innovations.

Explore Campus Resources

If you are working on a limited budget, find out what resources you have available on your campus to help you. Ideas to investigate include: web page design and cgi scripting assistance, data entry, and statistical analysis and reporting. The Information Technology department at Colleen's institution had developed very basic cgi scripts to process online web forms. She worked with them to insert minimal, but specific, scripts into our html coding that would ensure specific fields to be filled out by the respondent. If the respondent neglected to fill out their Institution Name, Respondent Name, and Respondent E-mail address, the form would have automatically bounced back to them for clarification on this needed information. Colleen also had access to a data entry service and a statistical analysis center where she could get in-person assistance with data entry and data analysis.

Our Survey: Example of the Process

Using our particular survey as an example, the steps below outline the basic process for implementing a web based survey.

1.) Talk to people to find out what is technologically possible on your campus.
2.) Based on the questions you decide to ask, start building your web page. Contact your IT department to see if it is possible to have submittable web forms on your campus server. Just about any HTML manual has explanations for creating forms. One of our favorites is *Sams Teach Yourself Web Publishing with HTML and XHTML in 21 Days* by Laura Lemay, Denise Tyler, and Rafe Colburn. When building your form, keep in mind the following elements:
    - Think carefully about the names you assign to the various fields. They should be short but make sense so that you don't have to constantly refer back to the survey when working with the responses.
    - You should give some thought to the survey design when coding your form because there are a few options. You can create radio buttons for the responses, which will let your respondent choose only one response per question, or you can create check boxes that enable your respondent to select several responses.
    - Think about which fields you want to require respondents to fill out. We had a student employee who works on our web pages come up with the java scripts to require certain fields to be filled out or the form would bounce back to them until the field was completed.
    (Note: Want help creating an online survey? There are many web-based companies geared specifically towards helping you create, then host, your online survey. A detailed list can be found by searching the Google category: Computers > Software > Marketing > Surveys. Or an additional listing of some free services can be found at http://www.librarysupportstaff.com/4surveys.html#free)
3.) If you are having the data from the form mailed directly to an email account instead of having it sent to a program to be dumped directly into a spreadsheet, you may want to consider having a dedicated email account for your survey project or setting up a filter in an existing email account so that all incoming surveys go directly to a specific mailbox for your project.
4.) Develop a cover letter to send out to your respondents. Make sure it includes who you are, why you are conducting the survey, directions for filling out the survey and a link to the web form. Be sure to specify a reasonable deadline for the responses.
5.) Set up a mail merge. (See sidebar for specifics).
6.) Give yourself some time to follow up on tracking down e-mail addresses for messages that may be bounced back to you from your original e-mailing.
7.) Send out a follow-up cover letter via a second e-mailing.

Now comes the hard work of analyzing the data and writing the article. By utilizing the Internet for survey research, much of your time and energy can be saved for the intellectual challenge of analyzing the data rather than expending it on the logistical hassles that accompany administering a survey the traditional way. More timely analyses will be afforded by employing this media as well.

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Appendix I: Setting up a Mail Merge

Creating and sending surveys using the Microsoft Mail Merge feature is a simple process, and the basics of one method are outlined below. The best place to go for more details is Microsoft Word Help (F1). Select the "Index" tab then type "mail merge" into the keyword box.

Before beginning a mail merge, we have two pieces of advice. The first is to test the mail merge process before you send your official survey. We created a test Excel spreadsheet using some of the real data from our actual spreadsheet, inserting our own and some friend's e-mail addresses into the e-mail field. We then merged the test spreadsheet with our cover letter. This testing process helped us to work out some minor bugs as well as see the merge process in action before our official version went out. Secondly, check with your campus computer systems people before sending a large mail merge survey. The may have technical advice or requirement you'll need to comply with.

The following instructions are for the Mail Merge feature in the PC version of Microsoft Word. Macintosh versions may have similar features.

Step One: Create a Main Document (Your Survey Cover Letter)
This is the document that will contain the static text, the message that is the same for each recipient, a.k.a the Form Letter. Generally, you will use Word to create the Main Document, but the Help feature also details how to use a WordPerfect document as the primary file for the form letter.

Open Word. Compose your letter. (We used a generic greeting for ours, "Dear First Year Experience Colleague.") Select "Mail Merge" from the "Tools" menu. Under "1. Main Document" select "Create" then select "Form Letters." You now have the main document for your mail merge.

Step Two: Open or Create a Data Source (Your list of survey recipients)
This is the file that contains the variable information such as recipients name and e-mail address. A data source file can be an Excel worksheet, Access database, Word table, Outlook contact list, or even an ASCII text file. The Help feature includes recommendations for what file type to use for your data source depending on how large your recipient list is or what advanced features you may want to utilize. *See* "Office programs you can use to make a list of names and addresses for a mail merge" in Help for more details.

Create your data source, which will include information such as institution name, recipient name, recipients address, recipients e-mail address, recipients title, etc. This particular step will vary as each survey is unique. We used the Excel spreadsheet that had been provided to us by the National Resource Center.

Step Three: Insert Merge Fields

Go back to your Main Document and insert what are called "Merge Fields" which correspond to fields in your Data Source and tell Microsoft Word where to go to pull the variable data from your Data Source. For example, in our cover letter we inserted three merge fields from Excel: Contact Name, Contact Title, and Institution. Remember, you can't do this step until you've created both the Main Document and the Data Source.

Under the tool menu, select "Mail Merge". Complete Step 2: "Data Source: Get Data" This ties (allows you to query) the data source with the main document.

In your Main Document, click on the "Insert Merge Field" button from the mail merge toolbar that will have shown up under your regular toolbar after you completed Steps One and Two. Select the fields you want. Be sure to add any spaces, commas, line spacing, or other punctuation to your Main Document so that your letter formats properly when the merge occurs. *See* "Tips on inserting merge fields" in Help for more details.

After doing this, the top of our cover letter looked like this:

> October 8, 2001
>
> <<Contact_Name>>
> <<Contact_Title>>
> <<Institutions>>
>
> Dear First Year Experience Colleague,

Step Four: Merge and Send
You're now ready to e-mail your letter to your list of recipients. (Note: You can also use Mail Merge to send to your printer or to fax numbers.)

Under the "Tool" menu, select "Mail Merge." Complete "3: Merge the Data with the Document." The last step includes a "Query Options" feature that allows you to set parameters on your merge. For instance, if an entry is missing the email address, the merge will ignore that entry if you select the email address field and "is not blank". When you are ready to send the merge as email, select "Electronic Mail" under "Merge to:" Please note: once you select "Electronic Mail" and click "Merge", the program will begin sending the forms as email. **Colleen Boff, M.L.S., is the First Year Experience librarian at Bowling Green State University, e-mail: cboff@bgnet.bgsu.edu / Kristin Johnson, M.L.I.S. is an Information Literacy/Instruction librarian at California State University, Chico, e-mail: kajohnson@csuchico.edu**